

THE COMMUNITY PLANNING GROUP'S GUIDE TO THE IMPACT OF HIV/AIDS ON KANSAS RESIDENTS

Bureau of Epidemiology and Disease Prevention
Kansas Department of Health and Environment
2002



This AIDS Ribbon was designed by the Kansas
Capital Area Chapter of the American Red Cross
to raise hope and awareness.

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GLOSSARY OF TERMS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
Case Count	The number of people with AIDS or HIV
CDC	Centers for Disease Control and Prevention
Confidence Interval (CI)	The range within which the true magnitude of effect lies with an assurance
CPG	Community Planning Group
ELISA Test	Enzyme-Linked Immuno-Sorbent Assay; A blood test that indicates the presence of antibodies to HIV. The HIV ELISA test does not detect the disease AIDS, but indicates if viral infection has occurred.
Epidemiology	The study of disease patterns in populations
HAART	Highly Active Antiretroviral Therapy
HARS	HIV/AIDS Reporting System
Het Sex	High risk heterosexual sex between a male and a female. As used in this profile, it generally refers to the risk behavior of sex with a bisexual male, IDU or person known to be HIV positive, following the CDC definition.
HIV	Human Immunodeficiency Virus
IDU	Injection drug use; illegal drugs, or drugs being used without prescription administered into the body with a needle
Incidence	The number of new cases in a specific time
KDHE	Kansas Department of Health and Environment
Mean	Arithmetic average
Median	The “middle point”. When cases are ranked in an order, the median refers to the point where half the cases are above and half are below. It describes the distribution of the data differently than the mean because extreme values have less influence.
MSM	Men who have sex with men, whether they identify as bisexual, heterosexual, or homosexual. As used in this profile, it generally refers to the risk behavior of unsafe, unprotected male-to-male sex.
NIR	No Identified Risk.
Opportunistic Infection	A disease caused by agents that maybe in our bodies or in the environment, but generally cause disease, or more severe disease, only when the immune system becomes depressed.
Prevalence	The estimated total number of cases at a specific point in time

Prevalent Cases	For this document, prevalent cases are those people presumed to be living with HIV or AIDS. If no date of death is reported to KDHE for an individual, that individual is presumed to be still living.
Rate	The proportion of people with a disease over a specific time period
Relative Risk (RR)	Indicates the likelihood of developing HIV or AIDS
SHAS	Supplement to HIV and AIDS Surveillance Project
Statistically Significant	A mathematical test used as a guide to determine whether the changes seen are likely due to chance alone or to some other factor(s).
STD	Sexually Transmitted Disease
Surveillance	The ongoing, systematic observation of a population for rapid and accurate detection of changes in the occurrence of particular diseases.
Western Blot	A blood test used to detect the HIV antibody. It is often used to confirm the results of an ELISA test. It is more specific and more expensive than an ELISA test.

EXECUTIVE SUMMARY

This is the seventh HIV/AIDS epidemiologic profile describing the epidemic in Kansas and outlining the impact of HIV/AIDS in Kansas and the third to specifically address HIV in the state. The Kansas Department of Health and Environment (KDHE) has monitored AIDS since 1983 and named reporting of HIV began on July 1, 1999. This report describes and analyzes HIV and AIDS cases reported as of December 31, 2001 and is primarily an update of the 2001 profile. It is primarily meant to be used for those who are planning or implementing prevention, intervention, and care for HIV-affected individuals in Kansas. The Kansas HIV/AIDS Community Planning Group uses the information in this Epi Profile as one tool for decision-making and allocating prevention funds.

Most of the information in the report focuses on the date of HIV or AIDS diagnosis and describes the epidemic both statewide and regionally. This may help planners determine risk factors at the time of disease acquisition rather than at the time a health care provider or laboratory reported the individual. While date of diagnosis is less likely to be influenced by definition changes or external factors, this method of presentation will tend to under-represent cases diagnosed in later years.

Statewide trends and highlights

All of the reported AIDS cases in 2001 were diagnosed less than one year after their initial HIV diagnosis. This seems to indicate people are being tested late in the course of their infection and may indicate missed opportunities for prevention and control.

Kansas is considered a low prevalence state for HIV and AIDS. There have been 2,383 cases of AIDS first diagnosed and reported in Kansas since 1983. Of those, 63 cases were diagnosed in 2001. There have been 225 people diagnosed with HIV and reported by name in Kansas since July 1, 1999. There are 991 reported persons with AIDS and 375 reported persons with HIV that are presumed to be living in Kansas. The AIDS rate for Kansas for 1999-2001 averaged 3.5/100,000 people per year.

The number of diagnosed and reported AIDS cases has been steadily declining since 1995. The sharp decline seen in the most recent year is seen annually as each profile is developed and is most likely due to reporting artifact rather than due to a sharp decline in newly diagnosed cases. The overall decrease may be due to advances in therapy for newly diagnosed HIV cases to slow the progression to an AIDS diagnosis.

There continue to be more men than women diagnosed with HIV and AIDS, with 2,293 men and 279 women reported in Kansas since 1983. The proportion of women diagnosed with AIDS has been slowly increasing over the past 10 years and women account for almost 13% of the AIDS cases diagnosed in the past three years, compared to just 6% of the cases diagnosed before 1990. Women account for 20% of the diagnosed and reported HIV cases since July 1, 1999. Black women accounted for 46% of all the female AIDS cases since 1999 and represented 27% of the reported Black AIDS and HIV cases for the same time period.

People of color represent a disproportionate number of Kansans diagnosed with AIDS. Blacks represent 6% of the Kansas population, but 25% of the most recently diagnosed AIDS cases. A total of 416 Kansas Blacks have been diagnosed with AIDS since 1983. Even more disturbing is that

while the rate of AIDS has decreased in nearly every racial or ethnic group in Kansas, the rate among Hispanics continues to increase and is now at 6.3/100,000 persons per year, more than triple what it was before 1990.

Nearly 42% of AIDS cases in Kansas were diagnosed in persons between the ages of 30 and 39, similar to previous reports. The mean age at which people were diagnosed with AIDS in Kansas was 38 and for HIV was 35.

Unprotected male-to-male sex is still the predominant risk factor reported and accounted for 52% (141) of the AIDS cases diagnosed since 1999 and 45.3% of the HIV cases. In Kansas, HIV is more commonly a sexually transmitted disease than a bloodborne pathogen. Unprotected heterosexual sex is the predominant risk behavior cited among women diagnosed with HIV or AIDS, with injecting drugs as the second most common risk factor among the 279 women diagnosed with HIV or AIDS.

Risk behaviors for bacterial STDs are often the same behaviors that put people at risk for HIV. Three quarters of the HIV infections in Kansas are acquired sexually, so STD statistics and trends can indicate populations that are potentially at higher risk for HIV. Prevention efforts targeting sexually acquired disease should lead to a reduction of HIV and AIDS as well as bacterial STDs. The number of cases of gonorrhea and chlamydia diagnosed were more than 10 times that of HIV and AIDS in 2001, indicating a higher prevalence of the bacterial STDs in the Kansas population. As with HIV and AIDS, Blacks and Hispanics are disproportionately at increased risk for bacterial STDs when compared with Whites. Less than 1% of individuals diagnosed with a bacterial STDs report male-to-male sex as a risk behavior.

Regional trends and highlights

As in past reports, Region 8 has the largest number of reported AIDS cases (356) and HIV cases (127) reported, but Region 1 continues to have the highest rate of AIDS (12/100,000 /year from 1998-2001). The highest rate is among African Americans in Region 1 at 39/100,000 /year from 1998-2001.

In Region 5, none of those diagnosed with AIDS between 1998 and 2001 are still living. That is the lowest percentage of any region and follows the same pattern as was first noted last year. This suggests that persons in Region 5 are diagnosed later in the course of the disease or have less access to care when compared to other regions in the state. Alternatively, it may also suggest that those in Region 5 moved elsewhere for care.

INTRODUCTION

The purpose of this epidemiologic profile of HIV/AIDS in Kansas is to describe the distribution of AIDS cases and HIV cases in the state and to help the HIV Prevention Community Planning Group (CPG) understand and interpret HIV-related epidemiologic data. This profile addresses four questions that are key to effective community planning:

1. What are the socio-demographic characteristics of the population?
2. What is the impact of HIV/AIDS on the population?
3. Who is at risk for becoming infected with HIV?
4. What is the geographic distribution of HIV infection and AIDS?

The epidemiologic profile is arranged around these key questions. The profile begins with a demographic description of the Kansas population. Three separate sections follow this section. The first section covers the state as a whole and describes AIDS and HIV cases first reported in Kansas.

The second section describes prevalent cases of both HIV and AIDS in the nine case management regions. The third major section is a brief description of bacterial STDs in Kansas, especially as they relate to HIV and AIDS cases in the state. Most of the HIV and AIDS data were generated using HARS, a statistical program provided by the HIV/AIDS Surveillance Branch of the Centers for Disease Control and Prevention (CDC). The STD data is from the KDHE database for statewide STD surveillance.

Epidemiology is the study of the distribution and determinates of disease frequency in human population. Information is grouped so that it is meaningful to describe disease transmission, frequency and trends. The goal of an epidemiologist and others in public health is to try to control or eliminate the disease in a population. Cases of AIDS have been monitored by KDHE since 1983. In July 1, 1999, HIV reporting by physicians and laboratory directors became mandatory. This allows KDHE to systematically monitor HIV infections that have not yet progressed to AIDS.

The epidemiologic information contained in this report is just one of the tools the CPG utilizes in the community planning process. The information contained in this report comes to KDHE primarily from HIV cases, AIDS cases, SHAS and other STDs that are reportable by law to KDHE from health care providers, hospitals, and laboratories. Most of the information is collected and maintained by the HIV/AIDS Surveillance section.

Population data used is derived from the 2000 census estimates supplied by the United States Census. The census is conducted every ten years, with yearly updated estimates. The estimates in the years immediately following a census are probably more accurate than the yearly updates.

Two major methods are used in this profile to describe the burden of disease on Kansas residents - one is a **case count** and the other is a disease **rate**. The epidemic may be described by counting the number of cases over a certain period of time. For instance, the number of AIDS cases, or case count of AIDS diagnosed among adult Kansans from 1999-2001 was 270.

It is also important to know how far the disease has spread in a population (what proportion of the population is affected in a specific time). This proportion is known as a rate. As an example, to

calculate the AIDS rate for Blacks in Kansas between 1999 and 2001, we count the number of AIDS cases diagnosed among Blacks (65 diagnosed between 1999 and 2001) and divide that count by the number of Blacks in the Kansas population in that time period for an annual estimated rate among Blacks from 1999-2001 of 13.9/100,000 per year. Used in this way, a rate tells us the proportion of people in a given population group who have AIDS. Both a case count and rate are valuable in describing the burden of HIV and AIDS in Kansas.

Incidence is the number of new cases in a population within a certain time period and can be used to measure disease frequency. For example, the incidence of AIDS cases diagnosed in Kansas in 2001 was 63. **Prevalence** is the total number of cases of disease at any one point of time; a “snapshot” of the number of cases in an area. It does not give an indication of how long a person has had a disease. It cannot be used to calculate rates of disease, but can provide an estimate of risk that an individual will have a disease at a point in time. For this document, prevalence includes those persons reported to KDHE that are presumed to be still living in Kansas. By the end of 2001, there were 991 prevalent AIDS cases in Kansas. Kansas is considered a low prevalence state for both HIV and AIDS.

Several conventions were followed in presenting data for this document. Most of the statewide information presented is based on diagnosis year rather than reported year. There is often reporting lag between when a case is diagnosed and when it is reported. HIV and AIDS cases should be reported to KDHE at the time of diagnosis, but case reports received in one year may be of individuals diagnosed in previous years. For instance, there were 225 HIV cases reported to KDHE by name since the last half of 1999 when named HIV reporting was established, but cases were first diagnosed as early as 1983. Despite the requirements of Kansas regulations, not all cases of HIV and AIDS diagnosed will be reported immediately. This makes the number of reported diagnosed cases for the most recent year lower than the actual number that are diagnosed. Depending on the year, between 60% and 95% of AIDS cases have been reported within two years of diagnosis. Using the year of report avoids the problem of reporting delays, but it is influenced by changes in surveillance case definitions, changes in surveillance resources, or other external factors.

If you have any questions, please contact Dr. Gail Hansen in the Bureau of Epidemiology and Disease Prevention at (785) 296-1127 or ghansen@kdhe.state.ks.us or Tamika Julian in the same Bureau at (785) 296-5587 or tjulian@kdhe.state.ks.us.

Current HIV/AIDS surveillance statistics are maintained at: www.kdhe.state.ks.us/aids.

WHAT ARE THE SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE KANSAS POPULATION?

The State of Kansas is located in the geographic center of the forty-eight contiguous states. Its boundaries form a rectangle around 105 counties, with about 200 miles between the north and the south borders and 400 miles between the east and west borders. The 2000 population estimate is 2.7 million people, or about one percent of the United States population. The population density varies widely, with about two-thirds of the population located in the eastern one-third of the state. Census estimates are that 55% of the state's population lives in metropolitan areas, compared with 80% of the U.S. population.

Kansas has three major metropolitan areas: Kansas City, Topeka, and Wichita. The four counties of Shawnee (Topeka), Sedgwick (Wichita), Wyandotte and Johnson (Kansas City) contain about 45% of the state's population. Counties on the west side of the state tend to be less populated, some having a population of less than 2,000. Thirty-one counties are classified as "frontier counties" (population density average < 6 persons per square mile). One of the challenges in Kansas is to develop health education and promotion programs reaching a large but less densely populated state, while meeting the needs of a varied population with specific pockets of need.

Approximately 87% of the population in the state is White, 5% African American, 1% American Indian, 2% Asian, and 5% from other racial groups. Individuals of Hispanic origin account for about 5% of the state population, and this proportion has increased in recent years. The gender distribution is 50% female and 49% male. Approximately 12 percent of Kansans are over 65 years of age. The average per capita income is \$27,670 with an unemployment rate of 4.4%. Compared to the U.S. population, a lower percentage of Kansans fall below the poverty level (10.9% versus 11.8%), and a lower percentage of children are below poverty level (15% versus 17%).

PART I

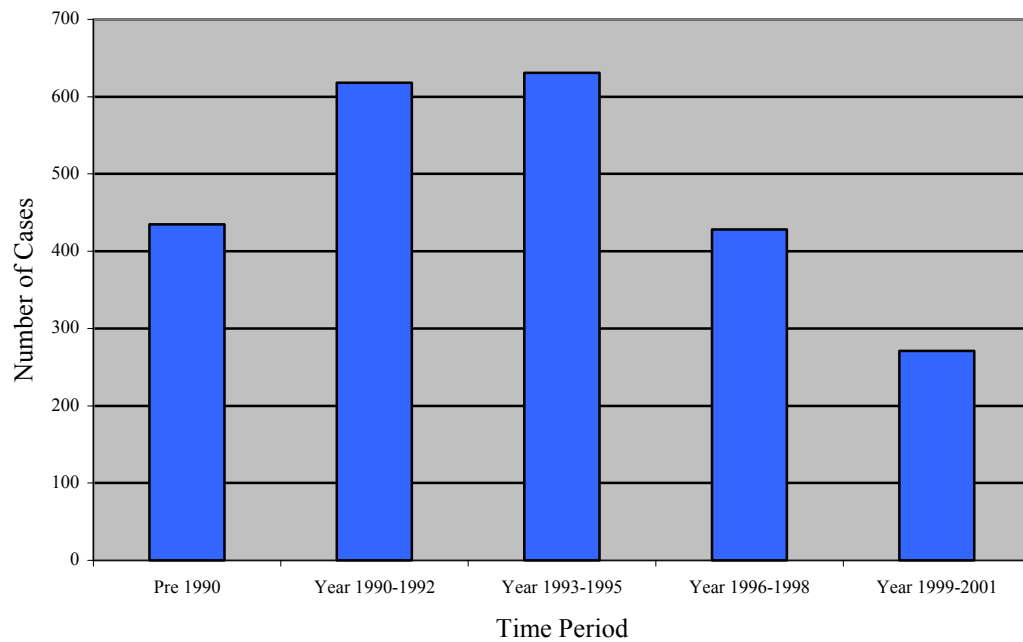
HIV and AIDS Cases First Diagnosed in Kansas

Total number of Kansas AIDS cases: 2383
Total number of Kansas AIDS deaths: 1392
Prevalent Kansas AIDS cases: 991

Trends in AIDS cases

AIDS cases are generally examined by year of diagnosis and trends are reported by year of diagnosis in three-year increments. The number of AIDS cases has decline by 32.2% between the periods 1993-1995 (631 cases) and 1996-1998 (428 cases) and by 36.7% between 1996-1998 (428 cases) and 1999-2001 (271 cases) as shown in Figure 1. The decline in AIDS cases may be attributed in part to the development and use of antiretroviral medications and protease inhibitors to treat HIV infection and/or prevention efforts.

**Figure 1. Kansas AIDS Cases
by Time Period**



THE IMPACT OF AIDS

Differences by Race/Ethnicity

Race and ethnicity information collected for AIDS reporting is slightly different than that collected for many other statistical purposes. Because the information in this document relies heavily on HIV/AIDS surveillance data, racial and ethnic groups will be discussed as they are presented by surveillance data using CDC criteria. Whites are those who indicate they are White, but not of Hispanic origin; Blacks are those who indicate they are African-American or African, but not of Hispanic origin. Native Americans are those who identify as Native American, American Indian, or Native Alaskan. Asians are those who identify as Asian or Asian-American. Hispanics are those who indicate they are of Hispanic or Latin ethnicity, irrespective of the race they indicate.

The distribution of Kansas cumulative AIDS cases by race/ethnicity reveals that Whites represent 74.7% of the state's diagnosed AIDS cases. However, the impact of AIDS on the Kansas population cannot be fully understood or measured until the distribution of race/ethnicity in the Kansas population is known. Non-Hispanic Whites account for 77.9% of the population in Kansas. Although non-Hispanic Blacks comprise less than 6% of the Kansas population, they represent over 17.5% of the diagnosed AIDS cases in Kansas. This reveals a disproportionate distribution of AIDS cases among the Black Kansas residents when compared to their distribution within the Kansas population.

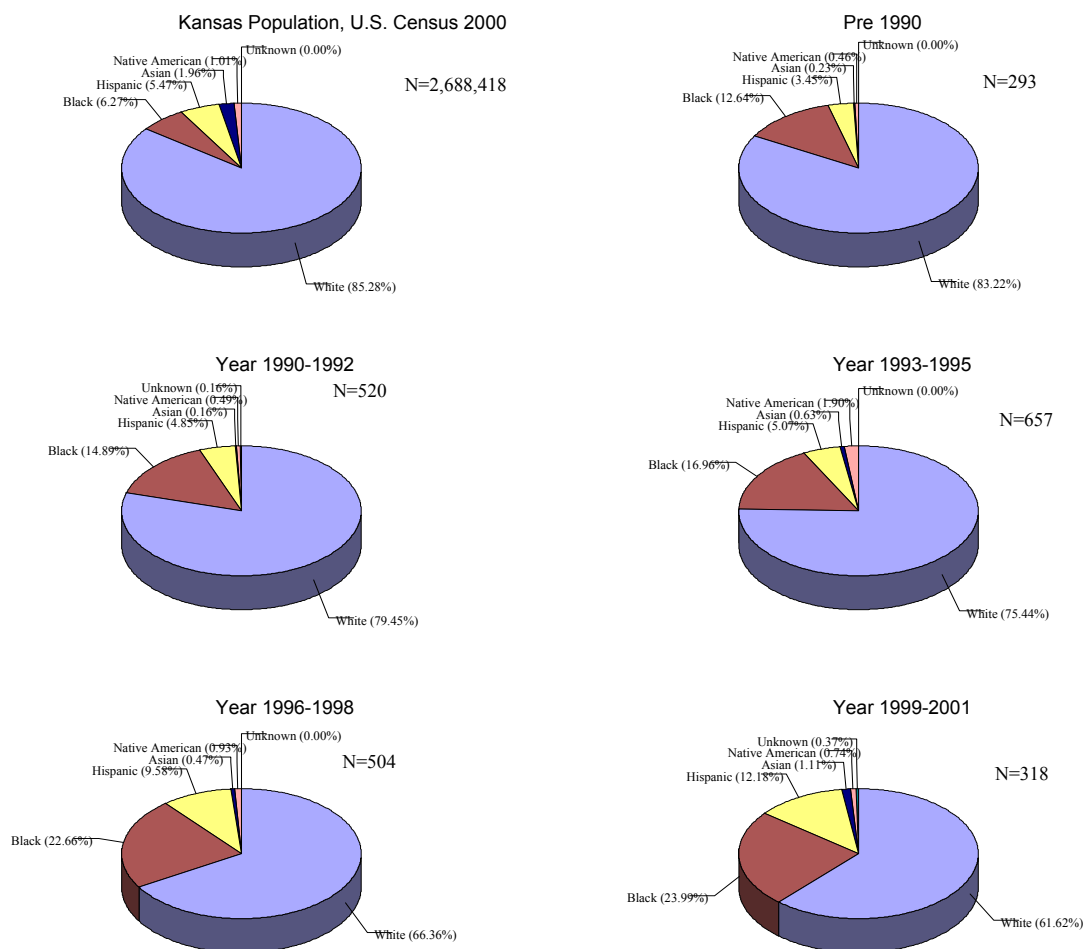
The number of diagnosed AIDS cases over the past eight years has declined among Whites and Blacks but has remained relatively constant among Hispanics, Native Americans, and Asians as shown in Table 1. This is evident by the 65% decline in AIDS cases among Whites between the period 1993-1995 (476 cases) and 1999-2001 (167 cases) and the 39% decline among Blacks between the period 1993-1995 (107 cases) and 1999-2001 (65 cases). This represents a faster decline among Whites than among Blacks. The small numbers of reported cases among the other racial and ethnic groups makes trend analysis less meaningful as small numbers are not statistically stable.

Table 1. Kansas AIDS Cases by Race/Ethnicity and Time Periods

Race/Ethnicity	Pre 1990	1990-1992	1993-1995	1996-1998	1999-2001	Total
White	362 (83.2%)	491 (79.5%)	476 (75.4%)	284 (66.4%)	167 (61.6%)	1780 (74.7%)
Black	55 (12.6%)	92 (14.9%)	107 (16.9%)	97 (22.7%)	65 (24%)	416 (17.5%)
Hispanic	15 (3.4%)	30 (4.9%)	32 (5.1)	41 (9.6%)	33 (12.2%)	151 (6.3%)
Asian	1 (0.2%)	1 (0.2%)	4 (0.6)	2 (0.5)	3 (1.1%)	11 (0.5%)
Native America	2 (0.5%)	3 (0.5%)	12 (1.9%)	4 (0.9%)	2 (0.7%)	23 (1.0%)
Unknown	0 (0.0%)	1 (0.2%)	0 (0%)	0 (0%)	1 (0.4%)	2 (0.08%)
Total	435	618	631	428	271	2383

As stated earlier, the number of diagnosed AIDS cases by race/ethnicity must be compared with the distribution of racial/ethnic groups within the Kansas population (U.S. Census 2000) in order to examine the impact of the epidemic within the state. In Kansas, Blacks are disproportionately affected when compared with their distribution in the Kansas population. The proportion of diagnosed AIDS cases among Blacks has been 2 - 4 times greater than the distribution within the Kansas population, as shown in Figure 2. The proportion of AIDS cases among Hispanics increased two-fold between the periods 1990-1992 and 1999-2001 when compared to their distribution within the Kansas population. The proportion has remained relatively stable among Native Americans and Asian populations in Kansas, but may be a reflection of small the numbers or misclassification.

**Figure 2. Kansas AIDS Cases
by Race/Ethnicity and by Time Period**



Although the rate of cases for Blacks has decreased (Table 2), it still has a disproportionate effect on the population compared to Whites. Between 1999-2001, the relative risk (RR) of becoming an AIDS case is greater for Blacks (RR = 5.6 with 95% CI = 4.2,7.5) and Hispanic (RR = 2.3 with a 95% CI = 1.6,3.4) compared to Whites.

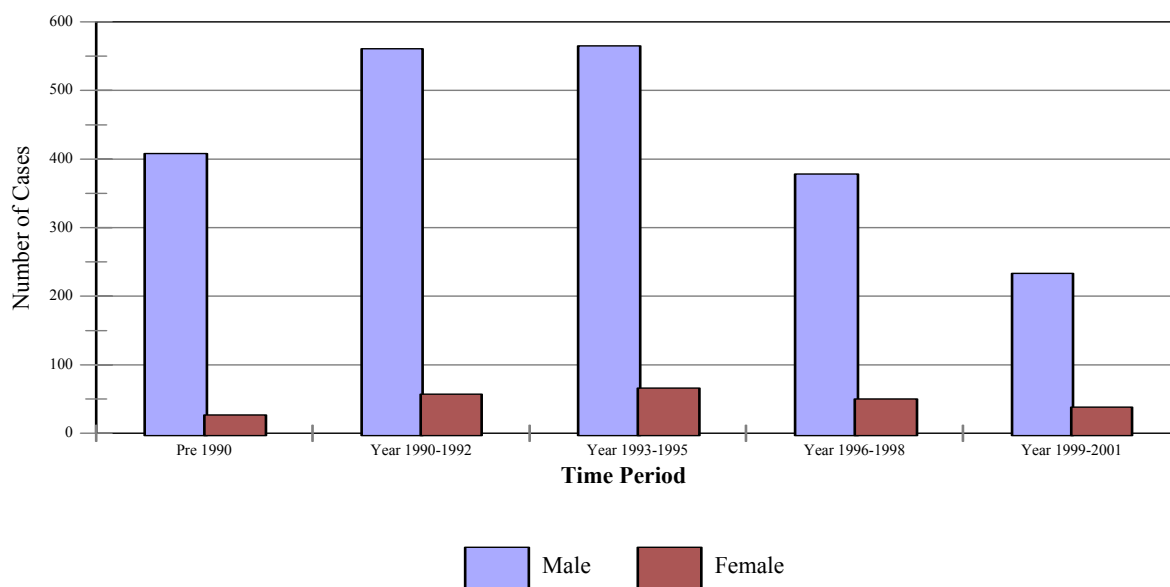
Table 2. Kansas AIDS Rates/100,000/Year by Race/Ethnicity and Time Period

Race/Ethnicity	Pre 1990 (number of cases)	1990-1992 (number of cases)	1993-1995 (number of cases)	1996-1998 (number of cases)	1999-2001 (number of cases)
White	1.7 (362)	7.8 (491)	7.3 (476)	4.2 (284)	2.4 (167)
Black	2.1 (55)	20.3 (92)	23.3 (107)	20.9 (97)	13.9 (65)
Hispanic	1.2 (15)	4.3 (30)	4.1 (32)	2.2 (41)	6.26 (33)
Asian	0.4 (1)	0.4 (1)	1.5 (4)	0.65 (2)	1.4 (3)
Native American	1.1 (2)	4.7 (3)	18 (12)	5.7 (4)	1.4 (2)
Total	1.3 (435)	7.5 (617)	7.3 (631)	3.8 (428)	3.5 (270)

Differences by Gender

Since the beginning of the AIDS epidemic in Kansas, the number and rate of AIDS cases has been higher among men than women as shown in Figure 3. In the latest time period, men account for 86% of the 233 reported AIDS cases. The number of AIDS cases among Kansas males has declined by 48% between the period 1993-1995 (565 cases) and 1999-2001 (271 cases).

Figure 3. Kansas AIDS Cases by Gender and Time Period



As shown in Table 3, an increased proportion in male AIDS cases has been reported among Blacks in each time period. Between 1999-2001, Black and Hispanic males were at greater risk (RR = 4.6 with a 95% CI = 3.3, 6.3 and RR = 2.2 with a 95% CI = 1.5, 3.2) of being diagnosed with AIDS than White males in Kansas.

The increase in proportion of female AIDS cases is also evident among women of color. Although AIDS cases have remained relatively stable among women across all time periods, Black women were at greater risk than White women for being diagnosed with AIDS for the period 1999-2001 (RR= 14.9, 95% CI= 7.4, 29.8). Relative risk was not calculated for Hispanic women, as the number of cases was too low for the results to be statistically stable.

Table 3. Kansas AIDS Cases by Race/Ethnicity and Gender

	Pre 1990 (number of cases)		1990- 1992 (number of cases)		1993- 1995 (number of cases)		1996- 1998 (number of cases)		1999- 2001 (number of cases)	
Race/Ethnicity	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
White	342 (83.8%)	20 (74.1%)	458 (81.6%)	33 (58%)	431 (76.3%)	45 (68.2%)	253 (68%)	31 (62%)	151 (64.8%)	16 (42%)
Black	48 (11.8%)	7 (26%)	72 (12.8%)	20 (35.1%)	88 (15.6%)	19 (28.8%)	81 (21.8%)	16 (32%)	49 (21%)	16 (42.1%)
Hispanic	15 (3.7%)	0 (0.0%)	26 (4.6%)	4 (7%)	31 (5.5%)	1 (1.5%)	38 (10.2%)	3 (6%)	30 (12.9%)	3 (7.9%)
Asian	1 (0.2%)	0 (0.0%)	1 (0.2%)	0 (0.0%)	4 (0.7%)	0 (0.0%)	2 (0.5%)	0 (0.0%)	1 (0.4%)	2 (5.3%)
Native American	2 (0.5%)	0 (0.0%)	3 (0.5%)	0 (0.0%)	11 (1.9%)	1 (1.5%)	4 (1.1%)	0 (0.0%)	1 (0.4%)	1 (2.6%)
Total*	408 (93.8%)	27 (6.25%)	561** (91%)	57 (9.2%)	565 (89.4%)	66 (10.5%)	378 (88.3%)	50 (11.7%)	233** (86%)	38 (14%)

*Percents may not sum to 100% due to rounding.

**Unknown race included in total

Indicates percent of cases for that gender in each time period

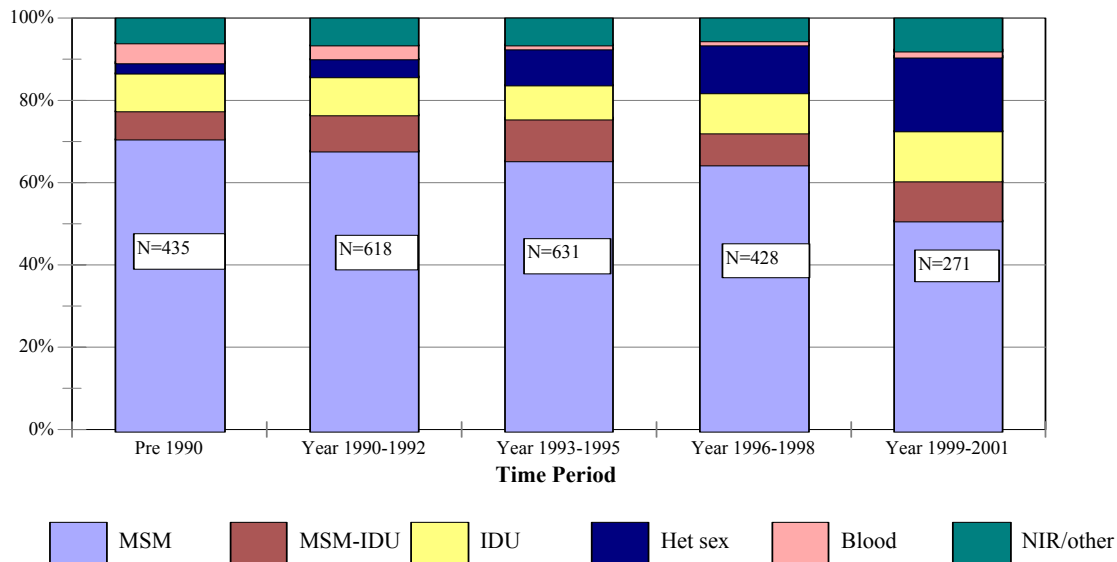
Differences by Mode of Transmission

Mode of transmission examines the behaviors that put people at risk for becoming infected with HIV. A hierarchy of risk factors exists in the HARS database so that only one risk factor per case is reportable. The hierarchy is based on risk behavior conventions used in surveillance with the greatest risk that would probably result in infection. For example, a man who reports sex with women and sex with men will be reported as MSM as the only risk factor.

As a reminder, in this profile, Heterosexual sex refers to all high-risk sex between a male and a female including sex with a bisexual male, an IDU or person known to be HIV positive. That is a CDC convention that is followed in this profile.

Cumulatively, the majority of Kansas' AIDS cases (64%) have been reported among MSM. However over the last two time periods the number and rate of AIDS cases who reported MSM as a risk factor has declined as shown in Figure 4 and Table 4. From 1999-2001 MSM represented 52% of the total AIDS cases in Kansas.

Figure 4. Risk Factors for Kansas AIDS Cases



*Het sex is risk behavior as defined in glossary.

Table 4. Kansas AIDS Cases by Risk Factor and Time Period

Risk Factor	Pre 1990	1990-1992	1993-1995	1996-1998	1999-2001	Total
MSM	314 (72.2%)	408 (66.0%)	406 (64.3%)	256 (59.8%)	141 (52%)	1525 (64%)
MSM/IDU	28 (6.4%)	60 (9.7%)	74 (11.7%)	35 (8.2%)	23 (8.5%)	220 (9.2%)
IDU	39 (8.9%)	58 (9.4%)	48 (7.6%)	44 (10.3%)	37 (13.7%)	226 (9.5%)
Het sex*	10 (2.3%)	42 (6.8%)	54 (8.6%)	66 (15.4%)	44 (16.2%)	216 (9.1%)
Transfusion/ Transplant	32 (7.4%)	27 (4.4%)	24 (3.8%)	6 (1.4%)	5 (1.8%)	94 (3.9%)
NIR/Other	12 (2.8%)	23 (3.7%)	25 (4%)	21 (4.9%)	21 (7.7%)	102 (4.3%)
Total**	435	618	631	428	271	2383

*Het sex is risk behavior as defined in glossary.

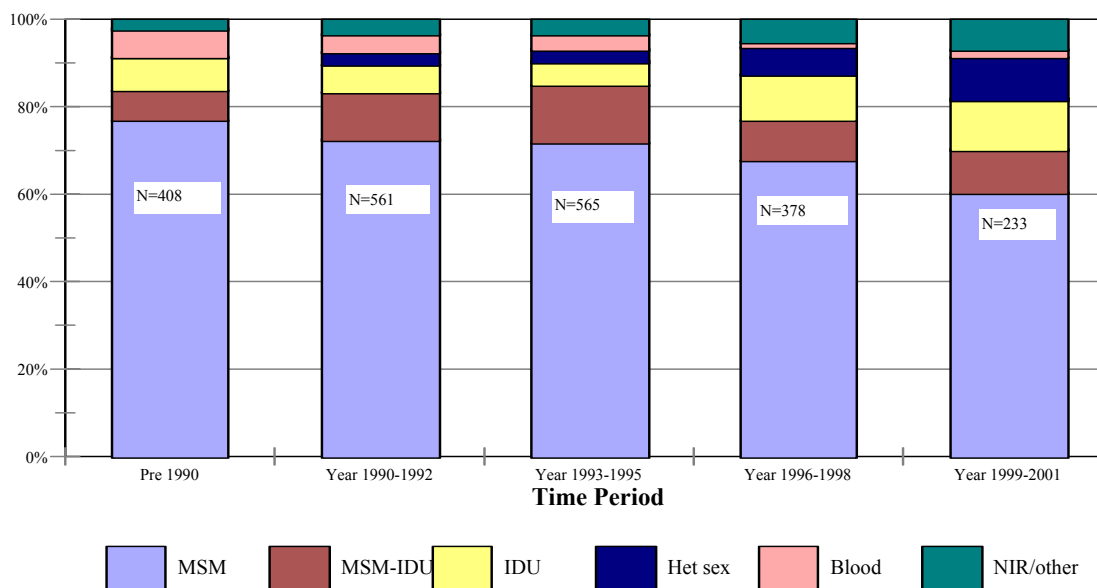
**Percents may not sum to 100% due to rounding.

Heterosexual sex proportion has significantly increased every time period since before 1999 and has been the second most common risk factor reported since the 1996-1998 time period. The proportion of MSM/IDU, IDU alone, and NIR remained unchanged since the beginning of the epidemic and the proportion of cases from transfusion/transplant patients has significantly decreased over time.

Of the 2,145 cumulative cases reported among men, 71.1% reported a risk factor of male-to-male sex. However, the number of cases reporting heterosexual sex as a risk factor among men has proportionally increased over time as shown in Figure 5 and Table 5.

Among all MSM, for the period 1999-2001, White men accounted for 74% of the cases and Black men accounted for 18% of the cases.

**Figure 5. Risk Factor for Kansas
Male AIDS Cases**



*Het sex is risk behavior as defined in glossary.

Table 5. Risk Factors Among Kansas Male AIDS Cases

Risk Factor	Pre 1990	1990-1992	1993-1995	1996-1998	1999-2001	Total
MSM	314 (76.9%)	408 (72.7%)	406 (71.9%)	256 (67.7%)	141 (60.5%)	1525 (71.1%)
MSM/IDU	28 (6.9%)	60 (10.7%)	74 (13.1%)	35 (9.3%)	23 (9.9%)	220 (10.3%)
IDU	31 (7.6%)	35 (6.2%)	32 (5.7%)	40 (10.6%)	27 (11.6%)	156 (7.3%)
Het sex*	1 (0.2%)	17 (3%)	15 (2.7%)	23 (6.1%)	22 (9.4%)	76 (3.5%)
Transfusion/T ransplant	26 (6.4%)	23 (4.1%)	19 (3.4%)	5 (1.3%)	4 (1.7%)	119 (5.5%)
NIR/Other	8 (2%)	18 (3.2%)	19 (3.4%)	19 (5.0%)	16 (6.9%)	30 (1.4%)
Total**	408	561	565	378	233	2145

*Het sex is risk behavior as defined in glossary.

**Percents may not sum to 100% due to rounding.

Overall, few trends are evident among women, mostly due to small numbers as shown in Figure 6 and Table 6. The number and proportion of AIDS cases with transplant/transfusion as the reported risk factor has significantly decreased. Among women of color, Blacks (10 cases) and Hispanics (3 cases) accounted for 59% of the 22 women who reported a risk factor of heterosexual sex for the

period 1999-2001 and 34.2% of the total female cases diagnosed and reported in that time period. High-risk heterosexual sex is the leading risk factor among Kansas's female AIDS cases. Injection drug usage has increased by 40% between 1996-1998 and 1999-2001, but the increase may be due to the small total numbers.

Figure 6. Risk factor Among Kansas Female AIDS Case

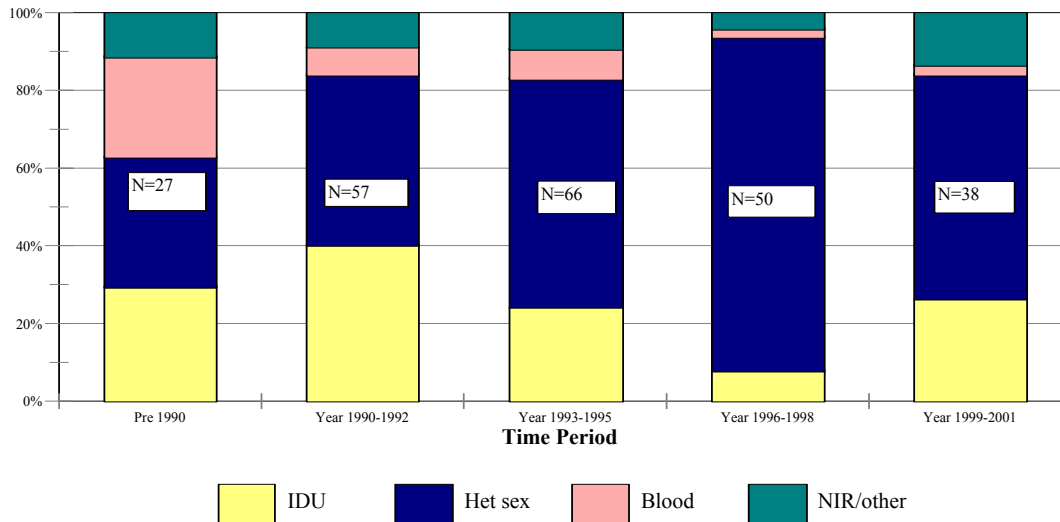


Table 6. Risk Factors Among Kansas Female AIDS Cases

Risk Factor	Pre 1990	1990-1992	1993-1995	1996-1998	1999-2001	Total
IDU	8 (29.6%)	23 (40.4%)	16 (24.2%)	4 (8%)	10 (26.3%)	61 (25.6%)
Het sex*	9 (33.3%)	25 (43.9%)	39 (59.1%)	43 (86%)	22 (58%)	138 (58%)
Transfusion/ Transplant	7 (26%)	4 (7.1%)	5 (4.5%)	1 (2%)	1 (2.6%)	18 (7.6%)
NIR/other	1 (3.7%)	3 (5.3%)	6 (9.1%)	2 (4%)	6 (15.8%)	21 (8.8%)
Total**	27	57	66	50	38	238

*Het sex is risk behavior as defined in glossary.

**Percents may not sum to 100% due to rounding.

Differences by Age

Table 7 and Figure 7 show the number of AIDS case diagnosed in Kansas by age group. The largest number of AIDS cases is among individuals 30 - 39 years of age at the time of diagnosis (1076 cases) with a median age of 38 years. The proportion of AIDS cases among individuals between the ages of 40-49 represents a larger proportion of AIDS cases than the 20-29 year age range for most time periods. This is different from what is being reported nationally, where an increase has been seen in diagnosed AIDS cases among a younger population. There have been a total of 25 AIDS cases diagnosed in children under 13 years in the state. Because of the small numbers of cases among children less than 13 years reported in Kansas, there is no further descriptive epidemiology about these pediatric cases.

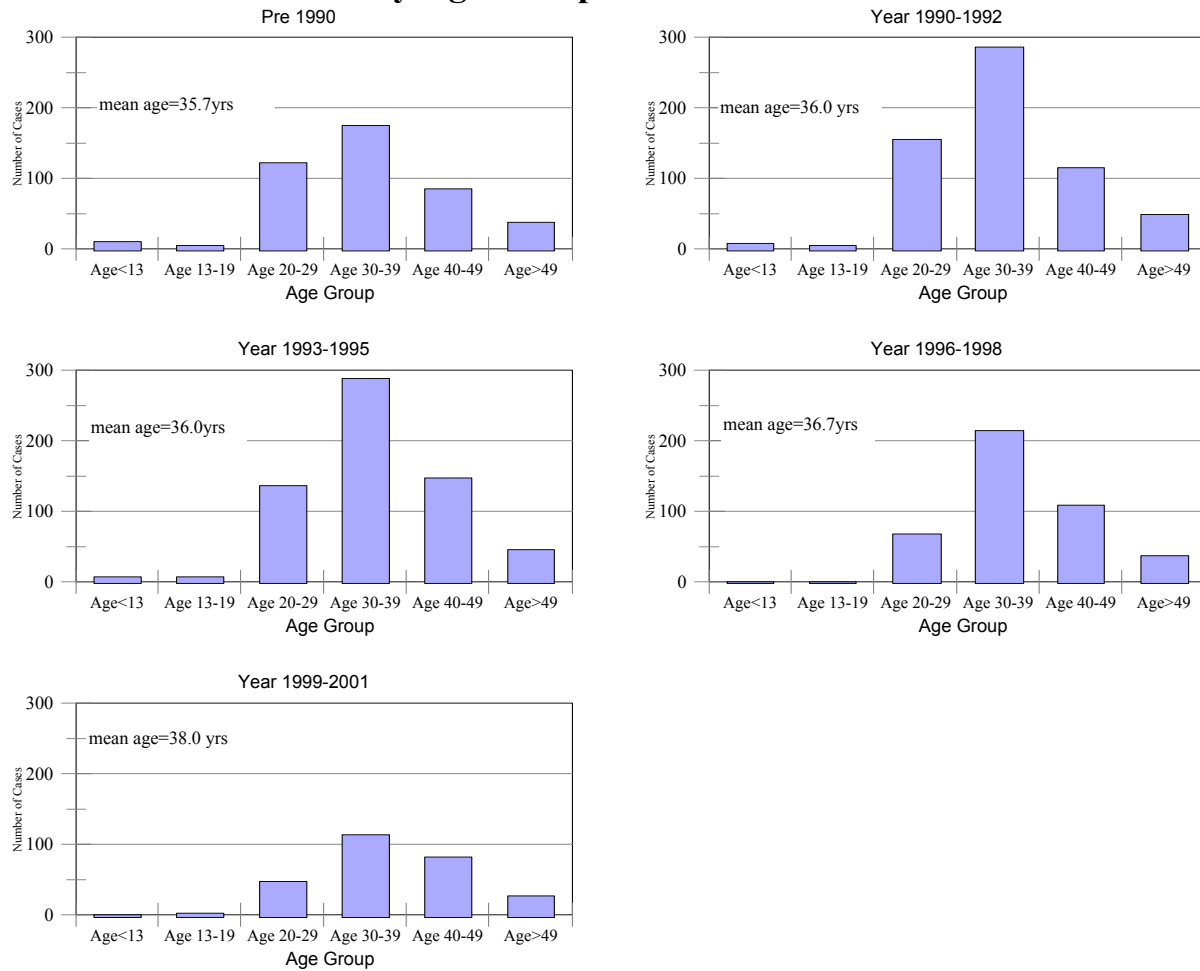
Table 7. Kansas AIDS Cases by Age Group

Age Group	Pre 1990	1990-1992	1993-1995	1996-1998	1999-2001	Total
< 13	10 (2.3%)	8 (1.3%)	7 (1.1%)	0 (0%)	0 (0%)	25 (1.0%)
13 - 19	5 (1.1%)	5 (0.8%)	7 (1.1%)	0 (0%)	2 (0.7%)	19 (0.8%)
20 - 29	122 (28%)	155 (25.1%)	136 (21.6%)	68 (15.9%)	47 (17.3%)	528 (22.2%)
30 - 39	175 (40.2%)	286 (46.3%)	288 (45.6%)	214 (50%)	113 (41.7%)	1076 (45.2%)
40 - 49	85 (19.5%)	115 (18.6%)	147 (23.3%)	109 (25.5%)	82 (30.3%)	538 (22.6%)
> 49	38 (8.7%)	49 (7.9%)	46 (7.3%)	37 (8.6%)	27 (9.9%)	197 (8.3%)
Total*	435	618	631	428	271	2383

* Percents may not sum to 100% due to rounding.

Percents in () indicate the percentage for each group of years.

**Figure 7. Kansas AIDS Cases
by Age Group and Time Period**



Differences by Region

Kansas is divided into nine case management regions. Region 8 has reported 34.1% of the cumulative AIDS cases reported in Kansas as shown in Table 8. Region 8 includes Wichita, which is the state's largest city. Region 8 also has the largest population of any of the regions, so it is not unexpected that the largest number of cases reported is from this region. The proportion of cases in Region 3 and Region 5 have decreased in the most recent three-year time period, with the difference reaching statistical significance in both regions.

Table 8. Kansas AIDS Cases by Time Period

Region	Pre 1990	1990-1992	1993-1995	1996-1998	1999-2001	Total
Region 1	105 (24.1%)	102 (16.5%)	123 (19.5%)	87 (20.3%)	54 (19.9%)	471 (19.8%)
Region 2	104 (23.9%)	127 (20.6%)	92 (14.6%)	51 (11.9%)	42 (15.5%)	416 (17.5%)
Region 3	16 (3.7%)	26 (4.2%)	28 (4.4%)	22 (5.1%)	7 (2.6%)	99 (4.2%)
Region 4	47 (10.8%)	64 (10.4%)	53 (8.4%)	48 (11.2%)	25 (9.2%)	237 (9.9%)
Region 5	13 (2.9%)	29 (4.7%)	41 (6.5%)	21 (4.9%)	8 (2.9%)	112 (4.7%)
Region 6	19 (4.4%)	21 (3.4%)	18 (2.9%)	12 (2.8%)	11 (4.1%)	81 (3.4%)
Region 7	16 (3.7%)	22 (3.6%)	23 (3.7%)	12 (2.8%)	14 (5.2%)	87 (3.7)
Region 8	110 (25.3%)	207 (33.5%)	239 (37.9%)	155 (36.2%)	102 (37.6%)	813 (34.1%)
Region 9	5 (1.1%)	20 (3.2%)	14 (2.2%)	20 (4.7%)	8 (2.9%)	67 (2.8%)
Total	435	618	631	428	271	2383

Percentage in () indicates the percentage for each group of years.

Region 1, which includes part of Kansas City, has the highest rate of AIDS cases reported in Kansas as shown in the table below (Table 9).

Table 9. Kansas AIDS Rate per 100,000 and Cases by Time Period and Region

Region	Pre 1990 (number of cases)	1990-1992 (number of cases)	1993-1995 (number of cases)	1996-1998 (number of cases)	1999-2001 (number of cases)
Region 1	15.2 (105)	15 (102)	18.2 (123)	12.8 (87)	7.9 (54)
Region 2	9.6 (104)	11 (127)	7.3 (92)	3.8 (51)	2.9 (42)
Region 3	4.6 (16)	7.1 (26)	7.2 (28)	5.3 (22)	1.6 (7)
Region 4	5.4 (47)	7.3 (64)	5.9 (53)	5.3 (48)	2.7 (25)
Region 5	2.2 (13)	4.9 (29)	6.9 (41)	3.5 (21)	1.3 (8)
Region 6	4.5 (19)	4.9 (21)	4.1 (18)	2.9 (12)	2.7 (11)
Region 7	1.7 (16)	2.4 (22)	2.5 (23)	1.3 (12)	1.6 (14)
Region 8	5.6 (110)	10.2 (207)	11.5 (239)	7.3 (155)	4.7 (102)
Region 9	1 (5)	4.2 (20)	2.8 (14)	3.9 (20)	1.5 (8)
Total number of cases	435	618	631	428	271

Kansas HIV Cases

Since Kansas initiated HIV reporting on July 1, 1999, 375 cases have been reported to KDHE. Of those, 225 cases were diagnosed after the implementation of HIV name reporting.

Since HIV cases were not reportable before July 1, 1999, the number of cases diagnosed and reported prior to July 1, 1999 does not accurately reflect the total number of HIV cases diagnosed in those years. Therefore, it is difficult to get an estimate of the cumulative number of HIV cases in Kansas. The data does not represent the total number of people diagnosed with HIV or the number currently living with HIV but without an AIDS diagnosis. It also does not include those who may be infected with HIV but have not yet been tested or reported. CDC's latest estimate from 1998 is that there are 1,250 people living in Kansas who are HIV positive but who have elected not to be tested. Calculations used for that estimate are done by CDC based on the ratios of HIV to AIDS cases in HIV reporting states that implemented HIV reporting before 1994.

Nearly 52% of the HIV cases were reported among Whites as shown in Table 10.

Table 10. Kansas HIV Cases by Race/Ethnicity and Gender diagnosed after July 1, 1999

Race/Ethnicity	Male	Female	Total
White	116	15	131
Black	40	19	59
Hispanic	17	8	25
Asian	1	1	2
Native American	1	0	1
Unknown	5	2	7
Total	180	45	225

The proportion of HIV cases by race/ethnicity resembles those diagnosed with AIDS between 1999-2001. The proportion of HIV cases is also similar to the proportion of AIDS cases reported for the period 1999-2001. From July 1999-December 2001, the relative risk of contracting HIV is greater for Blacks (RR=6.5 with 95% CI = 4.8, 8.9) than for Whites.

Females account for 20% of the reported HIV cases but only 14% of the reported AIDS cases for the period 1999-2001 as shown in Figure 8.

Figure 8. HIV and AIDS Distribution by Gender

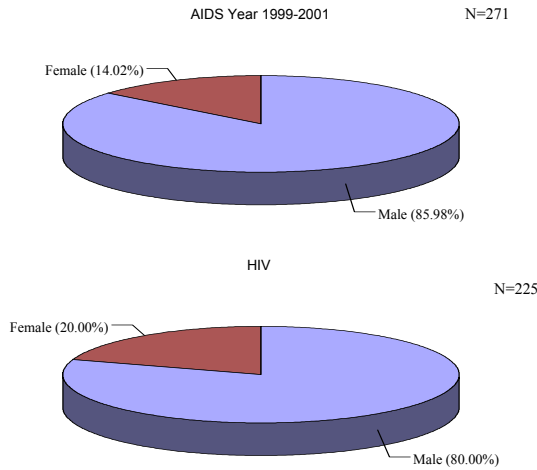


Table 11 shows the rate of HIV infection by race/ethnicity per 100,000. The majority of HIV cases (80%) and the highest rate (4.5/100,000/year) were among men. Black males represent 22.2% of the reported HIV cases among men. The proportion of HIV cases among men by race/ethnicity resembles those reported with AIDS for the time period 1999-2001. Black males also had the highest relative risk (RR= 4.9, 95%CI =3.4,7) for contracting HIV compared to White males.

Black (42.2%) and Hispanic (17.8%) women represent 20% of the 45 reported HIV cases among women. Among women, Blacks had the highest risk factor (RR=18.9, 95%CI = 9.6,37.1) for contracting HIV compared to White women.

Table 11. Kansas HIV Rates per 100,000, 1999-2001

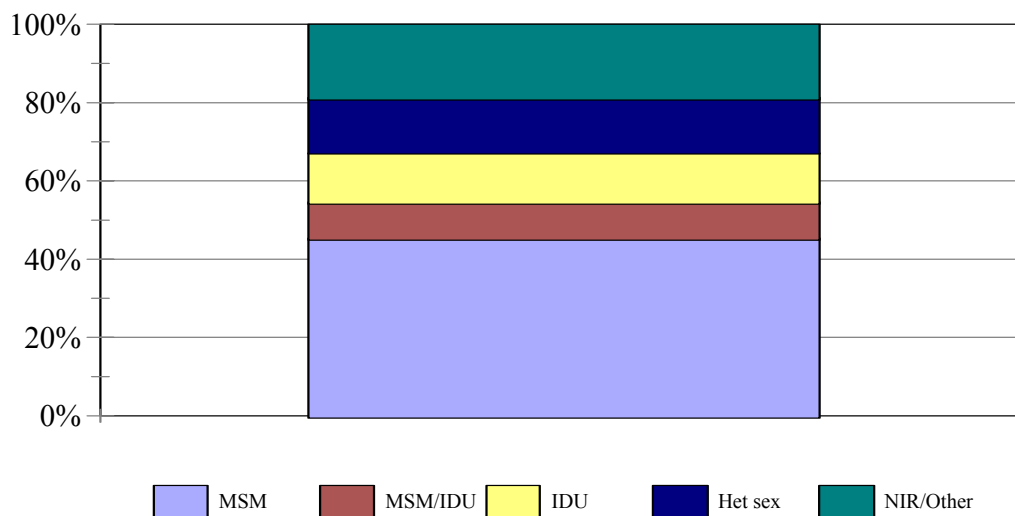
Race/Ethnicity	Rate (number of cases)
White	1.9 (131)
Black	12.6 (59)
Hispanic	1.5 (8)
Asian	1.4 (2)
Native American	1.4 (1)
Total*	2.8 (225)

Total* Includes 7 cases of unknown race/ethnicity.

HIV Mode of Transmission

The mode of transmission for those infected with HIV is similar to those diagnosed with AIDS in the last three years as shown in Figure 9 and Table 12. The majority of cases (45.3%) reported male-to-male sex as a risk factor for contracting HIV. IDU was reported as a risk factor in 12.4% of the cases. This is less than the 13.7% of the AIDS cases who reported IDU as a risk factor for the period 1999-2001.

**Figure 9. Risk Factor For Kansas
HIV Cases**



*Het sex is risk behavior as defined in glossary.

Seventy three percent of men who reported a risk factor of male-to-male sex were White, similar to that seen for the most recent time period of AIDS diagnoses.

Table 12. Kansas HIV Cases by Risk Factor and Gender

Risk Factor	Male Cases	Females Cases	Total HIV Cases
MSM	102 (56.7%)	-	102 (45.3%)
MSM/IDU	21 (11.7%)	-	21 (9.3%)
IDU	16 (8.9%)	12 (26.7%)	28 (12.4%)
Het sex*	13 (7.2%)	19 (42.2%)	32 (14.2%)
NIR/Other	28 (15.6%)	14 (31.1%)	42 (18.7%)
Total	180	45	225

*Het sex is risk behavior as defined in glossary.

HIV Age Group

The largest age group among Kansas HIV cases (Figure 10 and Table 13) is similar to the AIDS age group, 30-39. With a median age of 35, it is expected that age of HIV diagnosis would occur before an AIDS diagnosis. Based on current literature and in the era of HAART, the difference in median age for AIDS diagnosis would have expected to be greater than for HIV diagnosis. It is not clear whether this reflects testing postponement or that infection occurs at a later age than in the rest of the United States. The proportion of HIV cases among those 20-29 years is greater than those 40-49 years, but less than those 30-39 years old.

Figure 10. Kansas HIV Cases by Age Group

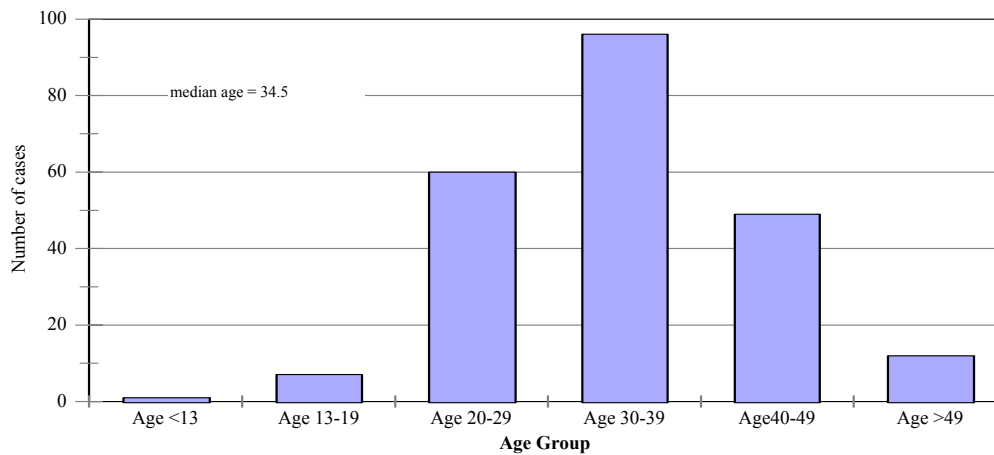


Table 13. Kansas HIV Cases by Age Group

Age Group	Number of Cases (% of total cases)
<13	1 (0.4%)
13-19	7 (3.1%)
20-29	60 (26.8%)
30-39	96 (42.9%)
40-49	49 (21.9%)
>49	12 (5.4%)
Total	225

HIV Regional Distribution

The regional distribution of HIV cases follows the same regional distribution pattern as AIDS cases. Nearly 71% of the HIV cases were reported from the highly populated regions (Region 1, Region 4 and Region 8) as shown in Table 14. Region 3 reported the fewest number of newly diagnosed HIV cases.

Table 14. Kansas HIV Cases by Region

Region	Cases (% of total cases)
Region 1	44 (19.7%)
Region 2	22 (3.9%)
Region 3	4 (1.8%)
Region 4	26 (11.7%)
Region 5	12 (5.4%)
Region 6	6 (2.7%)
Region 7	9 (4.0%)
Region 8	89 (39.9%)
Region 9	11 (4.9%)
Total*	223

*Two are unknown

SUPPLEMENT TO HIV AND AIDS SURVEILLANCE PROJECT (SHAS)

The SHAS Project is an in-depth interview designed to learn more about the problems faced by people living with HIV/AIDS in Kansas. The information obtained from this research will help in planning service programs that better meet the needs of the individuals in Kansas that are living with HIV/AIDS. It will also be used to help target prevention efforts in assessing the populations in Kansas with the greatest risk of infection. To be eligible for the study, the person must be 18 yrs of age or older and be HIV/AIDS positive. After a person is reported to KDHE for 6 months they become eligible. Likewise, they are eligible only if they have been reported for 5 years or less. From August 1, 2001 to December 31, 2002, 39 participants have been interviewed.

PART II

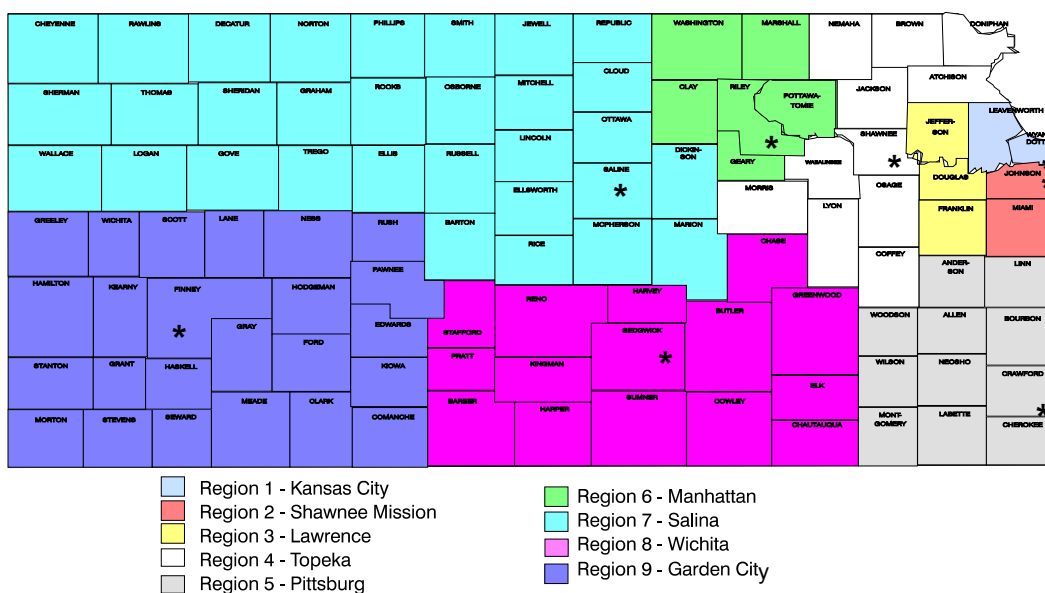
Impact of HIV and AIDS in Kansas

Each HIV case management-planning region is presented in some detail. Those regions with fewer identified cases and smaller numbers of prevalent cases will not be discussed as thoroughly as those regions with larger numbers. This is done mostly to assure the confidentiality of infected persons. Also, smaller numbers mean that rates and proportions are unstable. Changes from one year or group of years may reflect true changes, but are more likely the result of normal variations that present as large changes with small numbers.

Prevalent HIV and AIDS cases and region of current residence are presented and used for calculations in this section. With only a small amount of collected HIV data, it is impossible to draw meaningful conclusions based only on HIV cases at a regional level. Most of the information on prevalent cases is presented in the table, with less emphasis in the narrative.

Since Kansas implemented HIV reporting on July 1, 1999, the HIV positive data does not reflect the total burden of the epidemic within the Kansas community.

HIV REGIONS in KANSAS



2000 Estimated population of Kansas: 2,688,418

Cases of HIV and AIDS presumed living in Kansas: 1,342

AIDS Cases 1998-2001

Most of the remainder of this section will discuss prevalent cases by region and cases diagnosed in the most recent four-year period. The four-year grouping was done in order to avoid the problems of the instability of statistics when working with small numbers of cases.

There were 395 AIDS cases reported in Kansas that were diagnosed between 1998 and 2001, with an overall average yearly rate of 3.7/100,000. Of the 395 AIDS cases diagnosed from 1998-2001, 240 (60.8%) are presumed living. The average age at AIDS diagnosis is 37.7 years from 1998-2001.

The number of AIDS cases was highest among Whites (235 cases), followed by Blacks (99 cases) and Hispanics (54 cases). However, the rate for Blacks (15.9/100,000) was six times that of Whites (2.5/100,000) and the Hispanic rate (8.1/100,000) was three times that of Whites. Men of color accounted for 44.7% of the AIDS cases reported among men although men of color represent 7% of men in Kansas.

Blacks (6 cases) and Hispanics (11 cases) accounted for 45.9% of the AIDS cases reporting IDU as a risk factor among men, but only 29.1% of those reporting MSM as a risk factor. Blacks (16 cases) and Hispanic (5 cases) represent 60% of the AIDS cases among women who report heterosexual sex as a risk factor.

Race/Ethnicity and Gender

People of color account for 37.6% and 32.2% of the prevalent HIV and AIDS cases respectively. Men of color account for 26% of the prevalent AIDS cases and 27% of the prevalent HIV cases.

White males account for 68.2% of the prevalent HIV and AIDS case among men. Although men of color represent 41% of the prevalent AIDS cases among men who report IDU as a risk factor, they only represent 30% of the prevalent HIV cases among men.

Women of color represent 56% and 43% of the prevalent HIV and AIDS cases respectively among women. Among women who report IDU as a risk factor, women of color account for 42% and 48% of the prevalent HIV and AIDS cases respectively. Women of color also represent the majority of prevalent HIV cases (66%) among women who report heterosexual sex as a risk factor but only 40% of the prevalent AIDS cases.

Prevalent HIV/AIDS Cases

There have been 2,388 people diagnosed and reported with AIDS in Kansas since 1983. This includes those currently living in Kansas regardless of where they were first diagnosed. Of those, 991 (42%) are presumed living in Kansas (see Table 15). Cases are presumed living if KDHE does not have a record of death. There were 375 cases of HIV reported in Kansas since 1999, of whom 351 are still living. The reported HIV cases may not reflect the total burden of HIV in Kansas as it does not include many diagnosed with HIV prior to 1999 but who have not been diagnosed with AIDS.

Table 15. Kansas Prevalent HIV and AIDS Patients Living in Kansas				
CHARACTERISTIC	NUMBER OF HIV CASES	NUMBER OF AIDS CASES	TOTAL	PERCENTAGE OF CASES
Gender				
Male	287	857	1,144	85
Female	64	134	198	15
Race/ethnicity				
White	211	672	883	66
Black	84	210	294	22
Hispanic	42	90	132	9
Asian	4	5	9	0.7
Native American	2	12	14	1
Unknown	8	2	10	0.7
Risk Behavior				
Male to male sex	165	579	744	55
Male to male sex and IDU	34	97	131	9.8
IDU	49	105	154	11
Heterosexual Sex~	54	137	191	14
Risk not identified	44	46	90	6.7
Other*	5	27	32	2.4

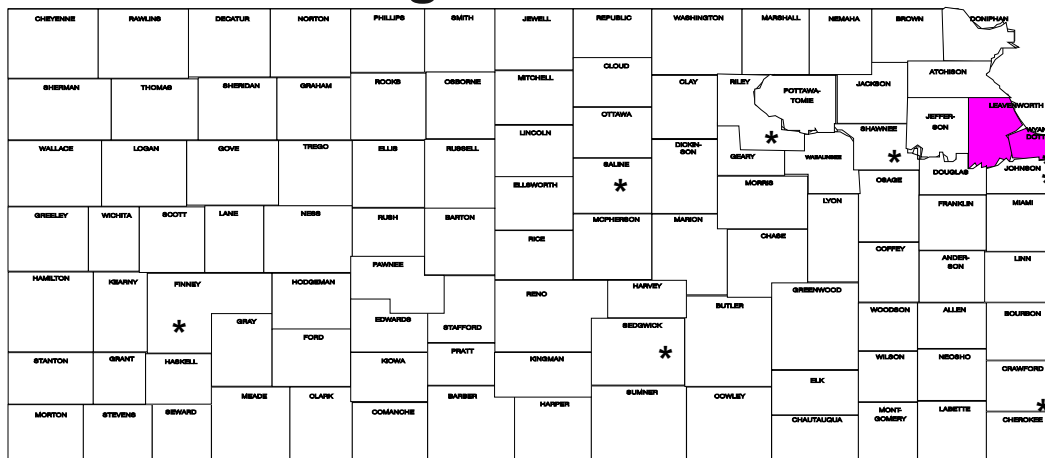
* AIDS resulting from receiving contaminated blood products, pediatric transmission

Some percentages may not add up to 100% due to rounding error

Unknown includes those for whom no race or ethnicity data was reported.

~Het sex is risk behavior as defined in glossary.

Region1



Counties in Region 1 : Leavenworth
Wyandotte

2000 Estimated population of Region 1: 226,573

Cases of HIV and AIDS presumed living in Region 1: 303

HIV and AIDS Case Counts Reported as of 12/31/01

Region 1 is in the northeastern section of Kansas and includes two counties as well as the city of Kansas City, Kansas. Whites make up 61% of the region's population, Blacks 23%, Hispanics 12%, Asian or Pacific Islanders 3%, and Native Americans <1%. This region has the largest percentage of African Americans in the state.

AIDS Cases Reported 1998-2001

There were 82 AIDS cases reported from Region 1 that were diagnosed between 1998 and 2001, with an overall average yearly rate of 12/100,000. This is the highest AIDS rate in the state. Of those diagnosed, 29% are living. The number of cases was slightly higher among Whites (15) than Blacks (6), though the rate for Blacks was more than twice that of Whites (39/100,000/yr and 15/100,000/yr). Men accounted for 96% of the cases. MSM (with or without IDU) accounted for 75% of the cases. IDU (with or with MSM among males) accounted for 50% of the cases.

Among White AIDS cases diagnosed between 1998 and 2001, 98% were among men. Seventy-three percent of the White male cases were between the ages of 30-49 when they were first diagnosed and 72% reported MSM, with or without IDU.

There were five Black women diagnosed with AIDS between 1998 and 2001, for an average yearly rate of 4.7/100,000/yr. This is five times the number of White women diagnosed with AIDS in the same time period with a rate fourteen times that of White women.

Prevalent HIV/AIDS Cases

Race/ethnicity and Gender

People of color account for 48% of the prevalent HIV and AIDS cases. Women of color represent 60.5% of the cases reported among women and Black men account for 30.8% of the total cases among men.

Modes by Race/Ethnicity

White males account for 59.5% of the prevalent cases reported among men with a risk factor of male-to-male sex (with or without IDU). However, Black males and Hispanic, males represent 57.1% of the male prevalent cases reporting IDU as a risk factor. Women who report a risk factor of heterosexual sex remains high among women of color accounting for 72.7% prevalent cases

Table 16. Kansas Prevalent HIV and AIDS Patients Living in Region 1				
CHARACTERISTIC	NUMBER OF HIV CASES	NUMBER OF AIDS CASES	TOTAL	PERCENTAGE OF CASES
Gender				
Male	59	201	260	86
Female	16	27	43	14
Race/ethnicity				
White	35	118	153	50.5
Black	26	76	102	1
Hispanic	11	33	44	14.5
Unknown	3	1	4	1.3
Risk Behavior				
Male to male sex	34	122	156	51.5
Male to male sex and IDU	3	22	25	8.3
IDU	7	29	36	11.9
Heterosexual sex~	18	34	52	17.2
Risk not identified	12	12	24	7.9
Other*	1	9	10	3.3

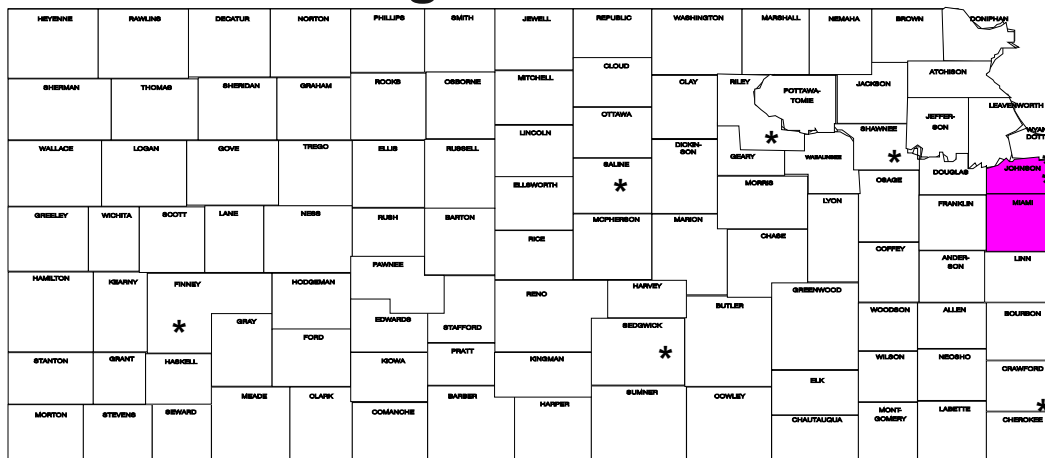
* AIDS resulting from receiving contaminated blood products, pediatric transmission

Some percentages may not add up to 100% due to rounding error

Unknown includes those for whom no race or ethnicity data was reported

~Het sex is risk behavior as defined in glossary.

Region 2



Counties in Region 2 : **Johnson**
Miami

2000 Estimated population of Region 2: 479,437

Cases of HIV and AIDS presumed living in Region 2 : 206

HIV and AIDS Case Counts Reported as of 12/31/01

Region 2 is also in the northeastern section of Kansas and includes two counties in the Kansas City Metropolitan area. Whites make up 96% of the population, African Americans, Hispanics, and Asians make up <2% each, and less than 1% of the population is Native American.

AIDS cases reported 1998-2001

There were 56 AIDS cases reported in Region 2 between 1998 and 2001, 34 of whom were still living in Region 2 at the end of 2001. The overall annual average AIDS rate in the region was 3.9/100,000. Men accounted for 86% of the newly diagnosed cases and MSM (with or without IDU) accounted for 67% of all cases and 74% of the cases among males.

Among the diagnosed cases among Whites 63% were male who reported a risk of MSM (with or without IDU).

Among Black males, 68% reported unprotected heterosexual sex as the only risk factor.

Detailed information is not presented for Hispanics because of the small number of cases. All of the cases among Hispanics diagnosed between 1998 and 2001 were male and over 20 years old at the time of diagnosis.

Prevalent HIV/AIDS Cases

Race/Ethnicity and Gender

Blacks represent 2% of the population in Region 2, they account for 10% of the prevalent cases.

Modes by Race/Ethnicity

White males account for 76% of the prevalent cases among men who report a risk factor of male-to-male sex (with or without IDU). White males also account for 80% of the males prevalent cases reporting IDU as a risk factor. Over 60% of women who report IDU as a risk factor were White. Women who reported heterosexual sex as their risk factor were evenly distributed among Blacks and Whites.

Table 17. Kansas Prevalent HIV and AIDS Patients Living in Region 2				
CHARACTERISTIC	NUMBER OF HIV CASES	NUMBER OF AIDS CASES	TOTAL	PERCENTAGE OF CASES
Gender				
Male	36	150	186	90
Female	6	14	20	10
Race/ethnicity				
White	26	134	160	78
Black	6	17	23	11
Hispanic	5	9	14	7
Asian	2	3	5	2.4
Native American	0	1	1	0.5
Unknown	3	0	3	2
Risk Behavior				
Male to male sex	22	101	123	60
Male to male sex and IDU	3	15	18	9
IDU	1	9	10	5
Heterosexual sex~	5	17	22	11
Risk not identified	10	17	27	13
Other*	1	5	6	3

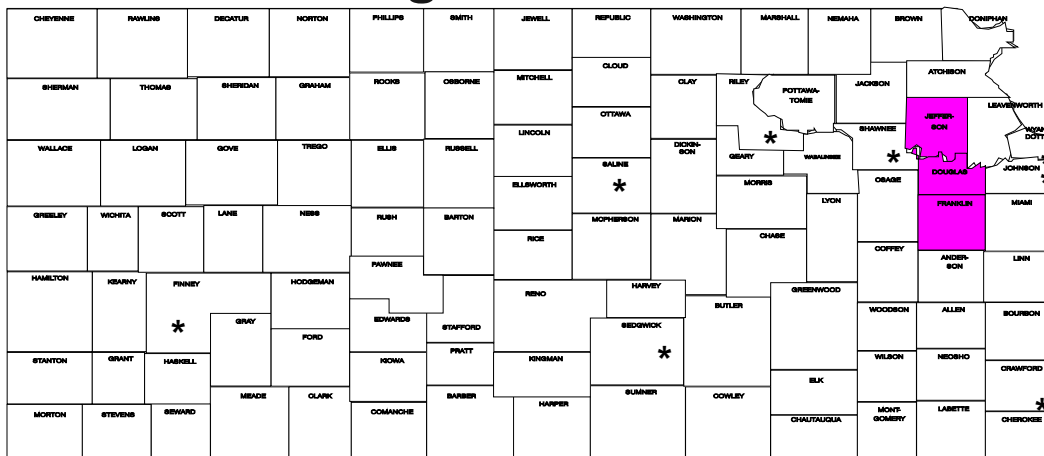
* AIDS resulting from receiving contaminated blood products, pediatric transmission

Some percentages may not add up to 100% due to rounding error.

Unknown includes those for whom no race or ethnicity data was reported

~Het sex is risk behavior as defined in glossary.

Region 3



Counties in Region 3 : **Douglas**
Franklin
Jefferson

2000 Estimated population of Region 3: 143,172

Cases of HIV and AIDS presumed living in Region 3 : 50

HIV and AIDS Case Counts Reported as of 12/31/01

Three counties in the northeastern section of Kansas comprise up Region 3. Douglas County includes the main campus of the University of Kansas and Haskell Indian Nations University. Whites account for 92% of the population, Blacks 3%, Hispanics 2%, Asians 3%, and Native Americans 2%. There are relatively more Native Americans in Region 3 than in any other region in Kansas, although the largest number of Native Americans lives in Region 8.

AIDS Cases Reported 1998-2001

There were 11 AIDS cases diagnosed in Region 3 between 1998 and 2001; 5 (45%) were still living at the end of 2001 and all were still living in Kansas. The average annual AIDS rate for 1998-2001 was 2.6/100,000. Ninety-three percent were among Whites and 75% reported MSM as a risk factor. Because of the small number of cases, discussion is limited to protect confidentiality. With the inherent instability of small numbers, small changes in numbers may suggest a large change in rates that is actually an artifact and not necessarily reflective of changes in the epidemic in the region.

The median age at AIDS diagnosis was 42.4 years. This is the highest median age of all the regions.

Prevalent HIV/AIDS Cases

White males account for 79% of the prevalent cases reported among men with a risk factor of male-to-male sex (with or without IDU). All of the reported IDU cases among men were White. Women account for 78% of the prevalent cases among women with a reported risk factor of heterosexual sex.

Table 18. Kansas Prevalent HIV and AIDS Patients Living in Region 3				
CHARACTERISTIC	NUMBER OF HIV CASES	NUMBER OF AIDS CASES	TOTAL	PERCENTAGE OF CASES
Gender				
Male	7	37	44	88
Female	0	6	6	12
Race/ethnicity				
White	5	33	38	76
Black	1	6	7	14
Hispanic	0	2	2	4
Native American	0	1	1	2
Unknown	1	1	2	4
Risk Behavior				
Male to male sex	6	26	32	64
Male to male sex and IDU	1	6	7	14
IDU	0	3	3	6
Heterosexual sex~	0	6	6	12
Risk not identified	0	1	1	2
Other*	0	1	1	2

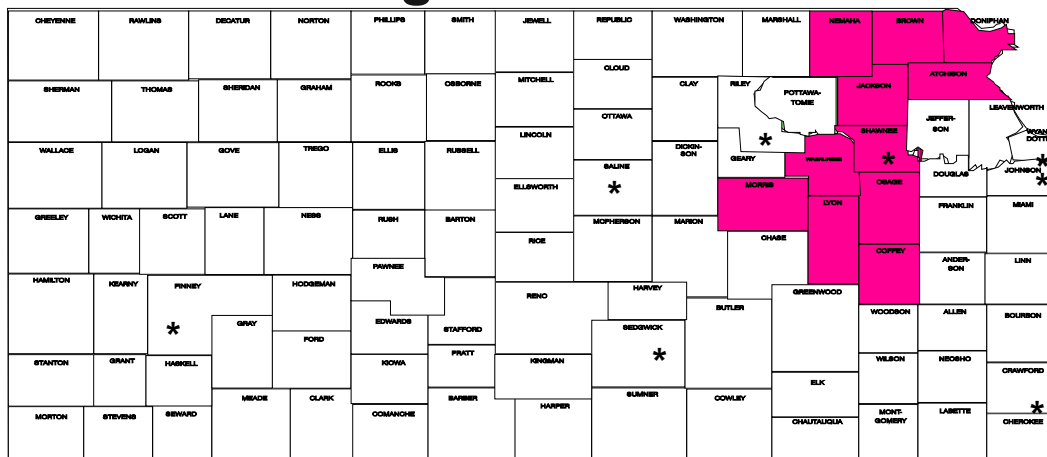
* AIDS resulting from receiving contaminated blood products, pediatric transmission

Some percentages may not add up to 100% due to rounding error

Unknown includes those for whom no race or ethnicity data was reported.

~Het sex is risk behavior as defined in glossary.

Region 4



Counties in Region 4 :

Atchison	Jackson	Osage
Brown	Lyon	Shawnee
Coffey	Morris	Wabaunsee
Doniphan	Nemaha	

2000 Estimated population of Region 4: 303,493

Cases of HIV and AIDS presumed living in Region 4 : 126

HIV and AIDS Case Counts Reported as of 12/31/01

Region 4 is in the north central section of Kansas, and includes eleven counties as well as the capital city, Topeka. Whites account for 81% of the population, Blacks 6%, Hispanics 11%, Native Americans 1%, and Asians 1%.

AIDS Cases Reported 1998-2001

There were 38 AIDS cases diagnosed between 1998 and 2001 for an average yearly rate of 4.2/100,000. There were 33 males and 5 females diagnosed and reported with AIDS and 21 were presumed living by the end of 2001.

Among Whites, MSM (IDU and non-IDU) accounted for 24 cases (63% of all cases). Unprotected heterosexual sex was reported as the only risk factor by women in this region. There were six Hispanics; five Hispanics were male.

Prevalent HIV/AIDS Cases

White males account for 59% of the prevalent cases among men who reported male-to-male sex (with or without IDU) and 62.5% of the male prevalent cases reporting any IDU. Women of color represent 63% of the prevalent cases among women who report a risk factor of IDU, although the numbers are small and therefore not stable.

Table 19. Kansas Prevalent HIV and AIDS Patients Living in Region 4				
CHARACTERISTIC	NUMBER OF HIV CASES	NUMBER OF AIDS CASES	TOTAL	PERCENTAGE OF CASES
Gender				
Male	31	77	108	86
Female	7	11	18	14
Race/ethnicity				
White	25	59	84	67
Black	11	22	33	26
Hispanic	2	6	8	3
Native American	0	1	1	0.8
Risk Behavior				
Male to male sex	17	51	68	54
Male to male sex and IDU	5	6	11	8.7
IDU	8	11	19	15
Heterosexual sex~	7	14	21	16.7
Risk not identified	1	4	5	4
Other*	0	2	2	1.6

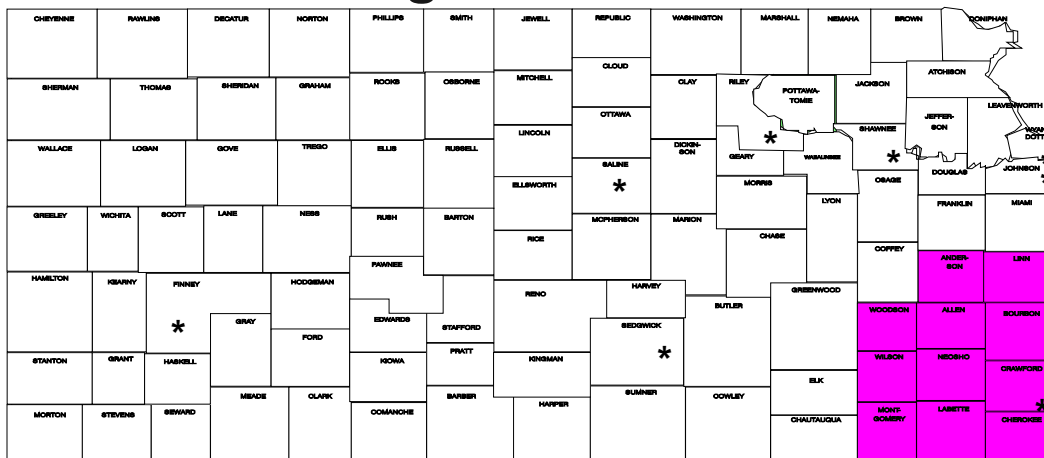
* AIDS resulting from receiving contaminated blood products, pediatric transmission

Some percentages may not add up to 100% due to rounding error

Unknown includes those for whom no race or ethnicity data was reported

~Het sex is risk behavior as defined in glossary.

Region 5



Counties in Region 5 :

Allen	Crawford	Neosho
Anderson	Labette	Wilson
Bourbon	Linn	Woodson
Cherokee	Montgomery	

2000 Estimated population of Region 5: 198,495

Cases of HIV and AIDS presumed living in Region 5 : 39

HIV and AIDS Case Counts Reported as of 12/31/01

Region 5 is in the southeastern section of Kansas and includes eleven counties. The region borders on both Oklahoma and Missouri. Whites account for 93% of the population, Blacks 3%, Hispanics 2%, Native Americans 1%, and Asians 1%.

AIDS Cases Reported 1998-2001

There were 13 cases of AIDS diagnosed in Region 5 between 1998 and 2001 and twelve were White and one was a Hispanic male. The average annual AIDS rate for those years was 1.3/100,000. Because of the small number of cases, discussion is limited to protect confidentiality. With the inherent instability of small numbers, small changes in numbers may suggest a large change in rates that are actually an artifact and not necessarily reflective of changes in the epidemic in the region.

None of the cases diagnosed between 1998 and 2001 are still living, unlike any other region. This suggests that persons in Region 5 may be diagnosed later in the course of the disease compared to other regions, that those diagnosed begin in poorer health, or have less access to care, or have moved to another region for care.

All of the cases diagnosed between 1998 and 2001 were over age 30 when first diagnosed.

Prevalent HIV/AIDS Cases

Region 5 has the smallest number of prevalent cases of any of the regions in Kansas. White males account for 88 % of the prevalent cases among men with a reported risk factor of male-to-male sex (with or without IDU). White women represent 77% of the prevalent cases among women with a reported risk of heterosexual sex.

Table 20. Kansas Prevalent HIV and AIDS Patients Living in Region 5.				
CHARACTERISTIC	NUMBER OF HIV CASES	NUMBER OF AIDS CASES	TOTAL	PERCENTAGE OF CASES
Gender				
Male	11	16	27	69
Female	5	7	12	31
Race/ethnicity				
White	14	20	34	87
Black	1	0	1	2.6
Hispanic	1	2	3	8
Native American	0	1	1	2.6
Risk Behavior				
Male to male sex	4	9	13	33.3
Male to male sex and IDU	1	5	6	15
IDU	3	1	4	10
Heterosexual Sex~	4	7	11	28
Risk not identified	4	1	5	13
Other*	0	0	0	0

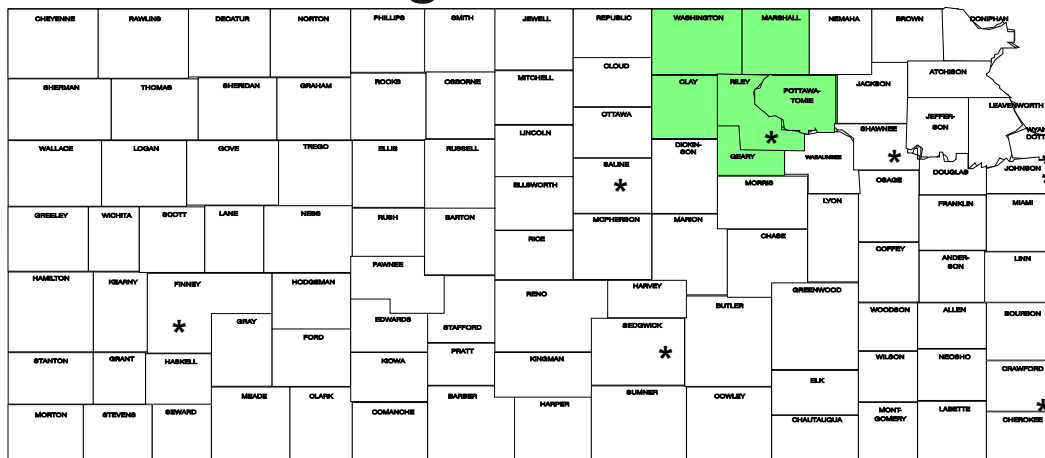
* AIDS resulting from receiving contaminated blood products, pediatric transmission

Some percentages may not add up to 100% due to rounding error

Unknown includes those for whom no race or ethnicity data was reported

~Het sex is risk behavior as defined in glossary.

Region 6



Counties in Region 6 : Clay Pottawatomie
 Geary Riley
 Marshall Washington

2000 Estimated population of Region 6: 135,269

Cases of HIV and AIDS presumed living in Region 6 : 42

HIV and AIDS Case Counts Reported as of 12/31/01

Region 6 is in the north central section of Kansas. Six counties make up Region 6, which also includes a major military base and the main campus of Kansas State University. This region has the smallest population of the nine AIDS regions. Whites make up 87% of the population, Blacks 6%, Hispanics 3%, Asians 2%, and Native Americans <1%.

AIDS Cases reported 1998-2001

There were 15 cases of AIDS diagnosed between 1998 and 2001 in Region 6. The average annual AIDS rate was 3.7/100,000 and 11 of the cases are living. Because of the small number of cases, discussion is limited to protect confidentiality. With the inherent instability of small numbers, small changes in numbers may suggest a large change in rates that are actually an artifact and not necessarily reflective of changes in the epidemic of the region.

There were 12 males and three females diagnosed in this region between 1998 and 2001. Twelve cases (80% of the total) reported unprotected MSM with or without IDU.

Prevalence HIV/AIDS Cases

White males represent 70% of the prevalent cases among men with a reported risk factor of male-to-male sex (with or without IDU).

Table 21. Kansas Prevalent HIV and AIDS Patients Living in Region 6.				
CHARACTERISTIC	NUMBER OF HIV CASES	NUMBER OF AIDS CASES	TOTAL	PERCENTAGE OF CASES
Gender				
Male	12	17	29	69
Female	3	10	13	31
Race/ethnicity				
White	9	15	24	57
Black	3	9	12	29
Hispanic	2	1	3	7
Native American	1	2	3	7
Risk Behavior				
Male to male sex	7	13	20	48
Male to male sex and IDU	1	2	3	7
IDU	3	5	8	19
Heterosexual Sex~	3	6	9	21
Risk not identified	1	0	1	2.4
Other*	0	1	1	2.4

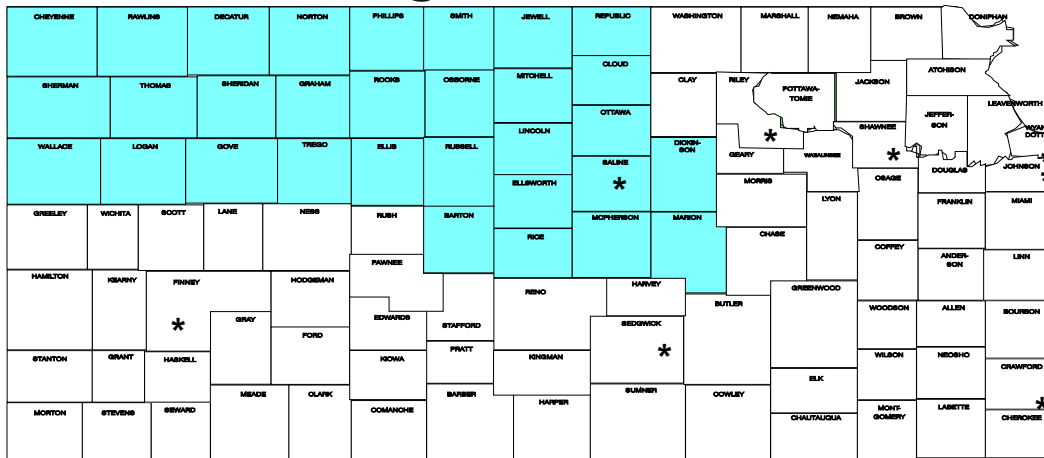
* AIDS resulting from receiving contaminated blood products, pediatric transmission

Some percentages may not add up to 100% due to rounding error

Unknown includes those for whom no race or ethnicity data was reported

~Het sex is risk behavior as defined in glossary.

Region 7



Counties in Region 7 :

Barton	Lincoln	Republic	Wallace
Cheyenne	Logan	Rice	
Cloud	Marion	Rooks	
Decatur	McPherson	Russell	
Dickinson	Mitchell	Saline	
Ellis	Norton	Sheridan	
Ellsworth	Osborne	Sherman	
Gove	Ottawa	Smith	
Graham	Phillips	Thomas	
Jewell	Rawlins	Trego	

2000 Estimated population of Region 7: 300,902

Cases of HIV and AIDS presumed living in Region 7 : 55

HIV and AIDS Case Counts Reported as of 12/31/01

Region 7 includes 32 counties that occupy most of the northwestern quarter of Kansas. Thirteen of the counties in Region 7 are considered frontier counties, defined as an average population density of <6 persons per square mile. Whites make up 95% of the population (the largest percentage of Whites in the state), Blacks 2%, Hispanics 2% and Asians and Native Americans collectively <1%.

AIDS Cases reported 1998-2001

There were 16 cases of AIDS diagnosed between 1998 and 2001 for an average annual AIDS rate of 1.8/100,000, the lowest rate of any of the regions. Nine persons diagnosed with AIDS during this most recent time period were still living. Because of the small number of cases, discussion is limited to protect confidentiality. With the inherent instability of small numbers, small changes in numbers may suggest a large change in rates that are actually an artifact and not necessarily reflective of changes in the epidemic in the region.

Of the 16 cases, 14 (88%) were men. There were 8 cases (53%) reporting MSM (with or without IDU), the smallest percentage of any region.

Prevalent HIV/AIDS Cases

White males account for 70% of the prevalent cases among men with a reported risk of male-to-male sex (with or without IDU). White males account for all cases among men with a reported risk factor of IDU (2 cases). White women reported 83% of the prevalent cases among women with a reported risk factor of IDU.

Table 22. Kansas Prevalent HIV and AIDS Patients Living in Region 7.				
CHARACTERISTIC	NUMBER OF HIV CASES	NUMBER OF AIDS CASES	TOTAL	PERCENTAGE OF CASES
Gender				
Male	14	31	45	82
Female	4	6	10	18
Race/ethnicity				
White	12	27	39	71
Black	4	8	12	22
Hispanic	2	2	4	7
Risk Behavior				
Male to male sex	9	19	28	51
Male to male sex and IDU	3	6	9	16
IDU	4	6	10	18
Heterosexual Sex~	2	4	6	11
Risk not identified	0	0	0	0
Other*	0	2	2	4

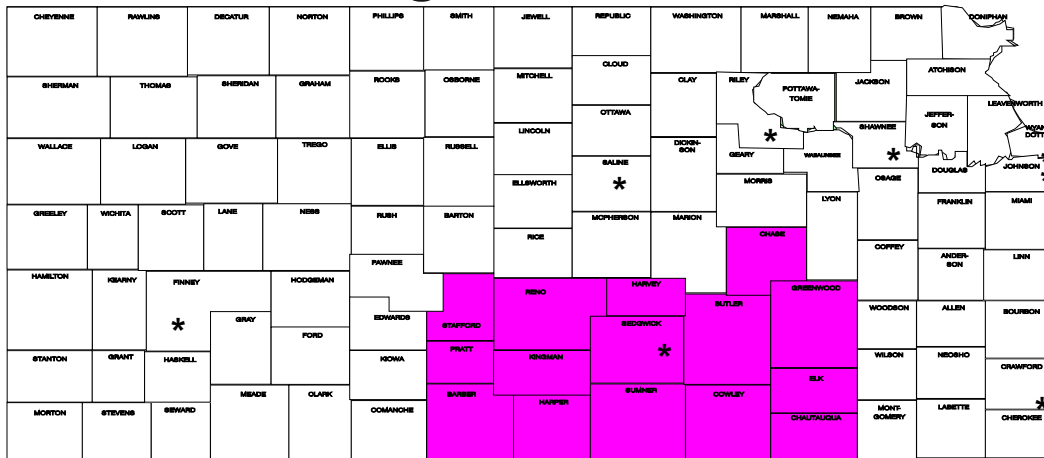
* AIDS resulting from receiving contaminated blood products, pediatric transmission

Some percentages may not add up to 100% due to rounding error

Unknown includes those for whom no race or ethnicity data was reported

~Het sex is risk behavior as defined in glossary.

Region 8



Counties in Region 8 :

Barber	Elk	Pratt
Butler	Greenwood	Reno
Chase	Harper	Sedgwick
Chataqua	Harvey	Stafford
Cowley	Kingman	Sumner

2000 Estimated population of Region 8 : 725,522

Cases of HIV and AIDS presumed living in Region 8 : 483

HIV and AIDS Case Counts Reported as of 12/31/01

Region 8 includes 15 counties in south central Kansas. The region includes the state's largest city, Wichita, and is the most populous of all the regions. Whites account for 90% of the population, Blacks 6%, Hispanics 3%, Asians 1%, and Native Americans <1%.

AIDS Cases Reported 1998-2001

There were 147 AIDS cases diagnosed in Region 8 from 1998 through 2001, with an average annual rate during that period of 6.8/100,000. This represents the largest number of cases, but not the highest case rate. There were 122 men (83%) and 25 women (17%) diagnosed from 1998 through 2001, of whom 96 were still alive as of December 31, 2001. There were 110 diagnosed cases from 1998-2001 that reported unprotected MSM (with or without IDU) as a risk behavior, accounting for 75% of all the cases and 81% of the male cases.

The median age of those diagnosed in that time period was 37.5 years. All were over age 20 when first diagnosed and 82% were over age 30.

Among the 80 Whites diagnosed with AIDS in the most recent four-year period, 19% reported IDU (with or without MSM). White males also accounted for 72% of the cases among MSM. Among the eight White women, five (63%) reported unprotected heterosexual sex as the only risk factor.

Among African Americans, 11 (27%) of the 41 diagnosed in the most recent time period reported IDU with or without MSM and 72% of the males reported unprotected MSM, with or without IDU. Sixty-three percent of African American women reported unprotected heterosexual sex as the only risk factor.

Of the 15 Hispanics diagnosed from 1998-2001, 62% reported MSM with or without IDU. There were twelve Hispanic men and three Hispanic women diagnosed with AIDS in that time period.

There were fewer than five Asians and Native Americans diagnosed with AIDS in Region 8 in the most recent time period.

HIV Cases Since 1999

Of the 127 HIV cases diagnosed and reported since 2001, 82.4% of the White men reported unprotected MSM (with or without IDU) and 61.7% of the White women reported unprotected heterosexual sex as their only risk factor.

Prevalent HIV/AIDS Cases

Women of color represent 48% of the prevalent cases among women. White males account for 77% of the prevalent cases among men with a reported risk factor of male-to-male sex (with or without IDU). Men of color account for 43% of the prevalent cases among men with a reported risk factor of IDU. Women of color account for 55% of the prevalent cases among women with a reported risk factor of IDU. Women of color also represent 40% of the prevalent cases among women with a reported risk factor of heterosexual sex.

Table 23. Kansas Prevalent HIV and AIDS Patients Living in Region 8.				
CHARACTERISTIC	NUMBER OF HIV CASES	NUMBER OF AIDS CASES	TOTAL	PERCENTAGE OF CASES
Gender				
Male	106	306	412	85
Female	21	50	71	15
Race/ethnicity				
White	81	250	331	69
Black	32	72	104	21.5
Hispanic	10	26	36	7.5
Asian	2	2	4	0.8
Native American	1	6	7	1.4
Unknown	1	0	1	0.2
Risk Behavior				
Male to male sex	65	224	289	60
Male to male sex and IDU	17	35	52	11
IDU	15	36	51	11
Heterosexual sex~	15	46	61	13
Risk not identified	12	9	21	4
Other*	3	6	9	2

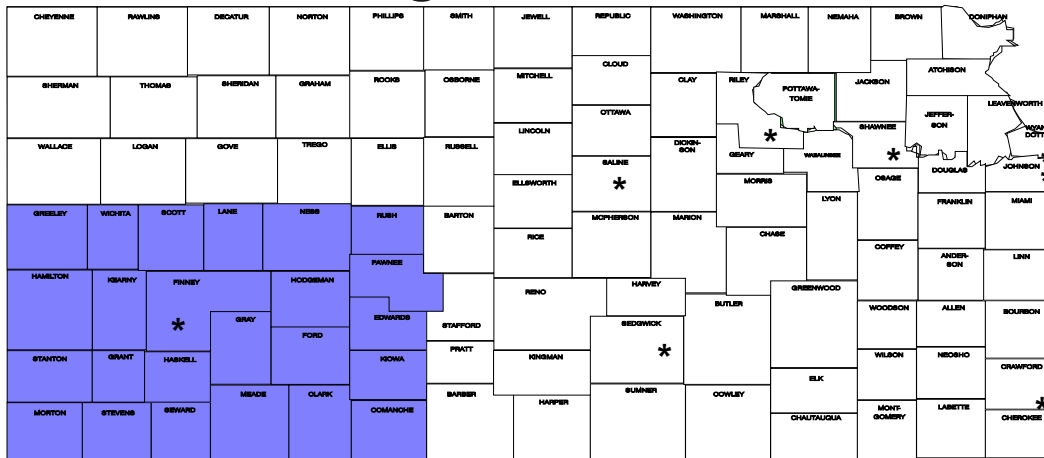
* AIDS resulting from receiving contaminated blood products, pediatric transmission

Some percentages may not add up to 100% due to rounding error

Unknown includes those for whom no race or ethnicity data was reported

~Het sex is risk behavior as defined in glossary.

Region 9



Counties in Region 9 :

Clark	Hamilton	Ness
Comanche	Haskell	Pawnee
Edwards	Hodgeman	Rush
Finney	Kearny	Scott
Ford	Kiowa	Seward
Grant	Lane	Stanton
Gray	Meade	Stevens
Greeley	Morton	Wichita

2000 Estimated population of Region 9 : 175,555

Cases of HIV and AIDS presumed living in Region 9 : 38

HIV and AIDS Case Counts Reported as of 12/31/01

Region 9 comprises much of the southwestern corner of Kansas and includes 24 counties, 15 of which are considered frontier counties and average less than 6 persons per square mile. Whites make up 74% of the population, Blacks 3%, Hispanics 20%, Asians 2%, and Native Americans <1%. There are proportionately more Hispanics living in Region 9 than in any other region. However, the largest number of Hispanics live in Region 9.

AIDS Cases reported 1998-2001

There were 17 cases diagnosed between 1998 and 2001 in Region 9 for an average annual rate of 3.2/100,000. Only seven of those cases are still living. Because of the small number of cases, discussion is limited to protect confidentiality. With the inherent instability of small numbers, small changes in numbers may suggest a large change in rates that are actually an artifact and not necessarily reflective of changes in the epidemic in the region.

Most of the diagnosed and reported cases were males, with fewer than five females diagnosed and reported with AIDS between 1998 and 2001. There were eight Whites, one Black and eight Hispanics.

Prevalent HIV/AIDS Cases

The proportion of Hispanic cases is the highest in Region 9 and account for nearly half of the cases, though the total number of prevalent cases is small. Of the Hispanic cases, 95% are men. White males account for 76% of the prevalent cases among men with a reported risk factor of male-to-male sex (with or without sex). White males also account for 68% of the prevalent cases among men with a reported risk factor of IDU. White women represent 65% of the prevalent cases among women with a reported risk factor of IDU.

Table 24. Kansas Prevalent HIV and AIDS Patients Living in Region 9.				
CHARACTERISTIC	NUMBER OF HIV CASES	NUMBER OF AIDS CASES	TOTAL	PERCENTAGE OF CASES
Gender				
Male	11	22	33	87
Female	2	3	5	13
Race/ethnicity				
White	4	16	20	53
Black	0	0	0	0
Hispanic	9	9	18	47
Risk Behavior				
Male to male sex	1	14	15	39
Male to male sex and IDU	0	0	0	0
IDU	8	5	13	34
Heterosexual sex~	0	3	3	8
Risk not identified	4	2	6	16
Other*	0	1	1	3

* AIDS resulting from receiving contaminated blood products, pediatric transmission

Some percentages may not add up to 100% due to rounding error

Unknown includes those for whom no race or ethnicity data was reported

~Het sex is risk behavior as defined in glossary.

Part III

Bacterial STDs

Overview

Chlamydia, gonorrhea and syphilis are reportable diseases in Kansas, similar to HIV and AIDS. Available data on STDs are a marker of unprotected sexual activity. Since nearly 80% of the Kansas HIV and AIDS cases report unprotected sex as a risk behavior, STD epidemiology may aid in identifying populations at risk for HIV and for targeting prevention and intervention programs.

Among reported cases of the bacterial STDs, racial and ethnic minorities are disproportionately represented. This may reflect reporting bias (e.g., Blacks may use public STD clinics more often for health care and be more likely to be screened or reported if positive). The majority of syphilis cases are reported from public STD clinics, whereas chlamydia and gonorrhea infections are reported from private physicians. Nearly 66% of reported bacterial STD reports are from private providers rather than publicly funded STD and family planning clinics.

More information on bacterial STDs in Kansas can be found at: www.kdhe.state.ks.us/hiv-std.

Chlamydia

In 2001, 6,172 cases of chlamydia were diagnosed in Kansas as shown in Table 25. This represents a 2% increase in diagnosed chlamydia cases when compared to 2000. Of the 6,172 cases diagnosed in 2001, 72% (4,445 cases) were diagnosed through private facilities as shown in Table 26.

Table 25. Chlamydia Cases by Year of Diagnosis and Race/Ethnicity

Race/Ethnicity	1999	2000	2001
White	3,048	2,967	2,831
Black	2,125	1,963	1,887
Hispanic	716	792	793
Asian	77	73	68
Native American	59	61	63
Unknown	39	237	530
Total	6,064	6,093	6,172

Table 26. Chlamydia Cases Diagnosed in 2001 by Facility Type and Race/Ethnicity

Race/Ethnicity	Public Facility*	Private Facility**	Total
White	771	2,067	2,838
Black	559	1,291	1,890
Hispanic	313	481	794
Asian	18	50	68
Native American	8	54	62
Unknown	18	502	520
Total	1,727	4,445	6,172

* Public facility is an STD clinic, TB clinic, Prenatal clinic, or HIV testing site.

** Private facility is a private physician's office or hospital (inpatient, outpatient, or ER).

As shown in Table 27, females represent 82% (5,084 cases) of the chlamydia cases diagnosed in 2001. This may be a result of the infertility prevention (chlamydia control) project that targets females. Of the 5,084 chlamydia cases diagnosed among females, 72.7% (1,390 cases) were diagnosed through a private facility.

Table 27. Chlamydia Case Diagnosed in 2001 by Race/Ethnicity, Gender and Facility

	Male		Female		
Race/Ethnicity	Public Facility*	Private Facility**	Public Facility*	Private Facility**	Total
White	106	291	665	1776	2838
Black	159	258	440	1033	1890
Hispanic	60	88	253	393	794
Asian	4	5	14	45	68
Native American	3	13	5	41	62
Unknown	5	96	13	406	520
Total	337	751	1,390	3,694	6172

* Public facility is an STD clinic, TB clinic, Prenatal clinic, or HIV testing site.

** Private facility is a private physician's office or hospital (inpatient, outpatient, or ER).

Region 8 and Region 1 represent 31% and 19% of the chlamydia cases diagnosed in 2001 respectively as shown in Table 28. However, Region 1 had the highest rate of chlamydia cases diagnosed in 2001, as shown in Table 29. White women in Region 8 accounted for the largest number of chlamydia cases. However, Region 1 had the largest number and proportion of Black females diagnosed with chlamydia compared to any other group in any region. Hispanic females in Region 9 represent the largest number (166 cases) of chlamydia cases among Hispanics.

Table 28. Chlamydia Cases Diagnosed in 2001 by Region, Race/Ethnicity and Gender

	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Total
White male	24	61	31	44	188	52	30	127	16	397
White female	238	287	174	364	52	163	200	722	105	2,441
Black male	98	18	15	47	23	55	11	158	8	417
Black female	581	71	41	141	55	114	19	476	7	1,473
Hispanic male	18	16	1	11	9	20	0	46	31	148
Hispanic female	126	44	9	67	20	30	15	180	166	646
Asian male	1	1	0	0	1	2	1	4	0	9
Asian female	9	8	10	5	2	9	4	11	2	59
Native American male	0	0	12	1	0	1	0	2	0	16
Native American female	3	0	23	7	1	2	2	9	0	46
Unknown male	13	21	8	15	49	9	0	31	1	101
Unknown female	61	67	16	39	8	0	6	164	8	419
Total	1,172	594	340	741	298	465	288	1,930	344	6,172

Table 29. Rate per 100,000 per year by Region of Chlamydia Cases Diagnosed in 2001

Region	Rate
Region 1	517.3
Region 2	124
Region 3	237.5
Region 4	244
Region 5	150
Region 6	343.8
Region 7	95.7
Region 8	266
Region 9	196
Total	229.6

Rates were calculated by using the number of people aged 13-60 in each region.

Gonorrhea

In 2001, 2,761 cases of chlamydia were diagnosed in Kansas as shown in Table 30. This is similar to the number of gonorrhea cases diagnosed in 1999.

Table 30. Gonorrhea Cases by Year of Diagnosis and Race/Ethnicity

Race/Ethnicity	1999	2000	2001
White	691	740	692
Black	1,849	1,736	1,679
Hispanic	156	181	204
Asian	22	18	13
Native American	19	15	13
Unknown	78	17	160
Total	2,815	2,671	2,761

Table 31. Gonorrhea Cases Diagnosed in 2001 by Facility Type and Race/Ethnicity

Race/Ethnicity	Public Facility*	Private Facility**	Total
White	246	452	692
Black	751	928	1,679
Hispanic	69	135	204
Asian	4	9	13
Native American	1	12	13
Unknown	10	144	160
Total	1,081	1,680	2,761

* Public facility is an STD clinic, TB clinic, Prenatal clinic, or HIV testing site.

** Private facility is a private physician's office or hospital (inpatient, outpatient, or ER).

Of the 2,761 cases diagnosed in 2001, 61% (1,680 cases) were diagnosed through private facilities as shown in Table 31.

As shown in Table 32, females represent 54.9% (1,516 cases) of the gonorrhea cases diagnosed in 2001. Of the 1,516 gonorrhea cases diagnosed among females, 67.5% (1,023 cases) were diagnosed through a private facility.

Table 32. Gonorrhea Cases Diagnosed in 2001 by Race/Ethnicity, Gender and Facility

	Male		Female		
Race/Ethnicity	Public Facility*	Private Facility**	Public Facility*	Private Facility**	Total
White	66	122	180	330	698
Black	488	403	263	525	1,679
Hispanic	30	48	39	87	204
Asian	1	1	3	8	13
Native American	0	4	1	8	13
Unknown	3	79	7	65	154
Total	588	657	493	1,023	2,761

* Public facility is an STD clinic, TB clinic, Prenatal clinic, or HIV testing site.

** Private facility is a private physician's office or hospital (inpatient, outpatient, or ER).

Region 1 and Region 8 represent 33.3% and 34.2% of the gonorrhea cases diagnosed in 2001 respectively as shown in Table 33. Region 8 had the highest rate of gonorrhea cases diagnosed in 2001, as shown in Table 34. Region 1 had the largest number (326 cases) and proportion of gonorrhea cases diagnosed among Black females than any other region. Region 1 also had the largest number (373 cases) and proportion of gonorrhea cases diagnosed among Black males than any other region. Region 1 and Region 8 had similar number of gonorrhea cases among Hispanic males and Hispanic females.

Table 33. Gonorrhea Cases Diagnosed in 2001 by Region, Race/Ethnicity and Gender

	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Total
White male	36	25	9	30	5	10	16	51	6	188
White female	102	50	32	80	18	25	31	154	18	510
Black male	373	34	26	87	14	34	13	306	4	891
Black female	326	27	17	66	5	33	6	306	2	788
Hispanic male	20	8	0	11	2	1	1	16	19	78
Hispanic female	30	5	3	16	1	10	2	35	24	126
Asian male	2	0	0	0	0	0	0	0	0	2
Asian female	2	0	1	0	0	4	0	3	1	11
Native American male	1	0	1	0	0	0	0	2	0	4
Native American female	2	0	3	2	0	1	0	1	0	9
Unknown male	16	7	1	5	8	2	1	33	2	82
Unknown female	9	1	2	8	8	1	0	36	1	72
Total	919	170	95	305	61	121	70	943	77	2,761

Table 34. Rate per 100,000 per year by Region of Gonorrhea Cases Diagnosed in 2001

Region	Rate
Region 1	40.6
Region 2	35.5
Region 3	19.8
Region 4	100.5
Region 5	30.7
Region 6	89.5
Region 7	25.3
Region 8	129.9
Region 9	43.9
Total	102.7

Syphilis

Syphilis cases in Kansas have increased from 14 cases in 2000 to 44 cases in 2001 as shown in Table 35. The increase in number of cases may represent a true increase, but may also be a result of better surveillance and case reporting. There were two syphilis outbreaks investigated in 2001. The outbreak in Shawnee County was spread out across the year with no more than 3 cases (16%) in any two-week period. Eleven of the first 22, two-week, time periods had at least one new syphilis case reported in it. The Sedgwick County outbreak occurred within a total of eighteen weeks. Six (60%) of the ten cases were reported within ten weeks of the first report. In both outbreaks and all the early syphilis cases reported in Kansas during 2001 the only co-factors disclosed were illicit drug uses, sex for drugs/money, and incarceration within the last 12 months.

Table 35. Syphilis by Year of Diagnosis and Race/Ethnicity

Race/Ethnicity	1999	2000	2001	Total
White	10	3	12	25
Black	14	6	22	42
Hispanic	5	5	10	20
Asian	1	0	0	1
Native American	0	0	0	0
Total	30	14	44	88

All syphilis cases diagnosed in 2001 were treated.

Table 36. Syphilis Cases by Year of Diagnosis, Race/Ethnicity and Gender

	1999		2000		2001	
Race/Ethnicity	Male	Female	Male	Female	Male	Female
White	3	2	3	0	7	5
Black	5	9	5	1	11	11
Hispanic	5	0	3	2	5	5
Asian	0	1	0	0	0	0
Native American	0	0	0	0	0	0
Total	13	17	11	3	23	21

The number of cases were evenly distributed in the highly populated regions (Regions 1, 4, 6, and 8).

Appendix A

1999 Revised Surveillance Case Definition for HIV infection

December 10, 1999 / 48(RR13);29-31

This revised definition of HIV infection, which applies to any HIV (e.g., HIV-1 or HIV-2), is intended for public health surveillance only. It incorporates the reporting criteria for HIV infection and AIDS into a single case definition. The revised criteria for HIV infection update the definition of HIV infection implemented in 1993 (18); the revised HIV criteria apply to AIDS-defining conditions for adults (18) and children (17,19), which require laboratory evidence of HIV. This definition is not presented as a guide to clinical diagnosis or for other uses (17,18).

I. In adults, adolescents, or children aged greater than or equal to 18 months, a reportable case of HIV infection must meet at least one of the following criteria:**

Laboratory Criteria

- a. Positive result on a screening test for HIV antibody (e.g., repeatedly reactive enzyme immunoassay), followed by a positive result on a confirmatory (sensitive and more specific) test for HIV antibody (e.g., Western blot or immunofluorescence antibody test)

or

- b. Positive result or report of a detectable quantity on any of the following HIV virologic (nonantibody) tests:

- 1. HIV nucleic acid (DNA or RNA) detection (e.g., DNA polymerase chain reaction [PCR] or plasma HIV-1 RNA)***
- 2. HIV p24 antigen test, including neutralization assay
- 3. HIV isolation (viral culture)

or

Clinical or Other Criteria (if the above laboratory criteria are not met)

- a. Diagnosis of HIV infection, based on the laboratory criteria above, that is documented in a medical record by a physician

or

- b. Conditions that meet criteria included in the case definition for AIDS (17-19)

II. In a child aged less than 18 months, a reportable case of HIV infection must meet at least one of the following criteria:

Laboratory Criteria

Definitive

- a. Positive results on two separate specimens (excluding cord blood) using one or more of the following HIV virologic (nonantibody) tests:
 - i. HIV nucleic acid (DNA or RNA) detection

- ii. HIV p24 antigen test, including neutralization assay, in a child greater than or equal to 1 month of age
- iii. HIV isolation (viral culture)

or

Presumptive

A child who does not meet the criteria for definitive HIV infection but who has:

- a. Positive results on only one specimen (excluding cord blood) using the above HIV virologic tests and no subsequent negative HIV virologic or negative HIV antibody tests

or

Clinical or Other Criteria (if the above definitive or presumptive laboratory criteria are not met)

- b. Diagnosis of HIV infection, based on the laboratory criteria above, that is documented in a medical record by a physician

or

- c. Conditions that meet criteria included in the 1987 pediatric surveillance case definition for AIDS (17,19)

III. A child aged less than 18 months born to an HIV-infected mother will be categorized for surveillance purposes as "not infected with HIV" if the child does not meet the criteria for HIV infection but meets the following criteria:

Laboratory Criteria

Definitive

- a. At least two negative HIV antibody tests from separate specimens obtained at greater than or equal to 6 months of age

or

- b. At least two negative HIV virologic tests* from separate specimens, both of which were performed at greater than or equal to 1 month of age and one of which was performed at greater than or equal to 4 months of age

AND

- c. No other laboratory or clinical evidence of HIV infection (i.e., has not had any positive virologic tests, if performed, and has not had an AIDS-defining condition)

or

Presumptive

A child who does not meet the above criteria for definitive "not infected" status but who has:

a. One negative EIA HIV antibody test performed at greater than or equal to 6 months of age and NO positive HIV virologic tests, if performed

or

b. One negative HIV virologic test* performed at greater than or equal to 4 months of age and NO positive HIV virologic tests, if performed

or

c. One positive HIV virologic test with at least two subsequent negative virologic tests****, at least one of which is at greater than or equal to 4 months of age; or negative HIV antibody test results, at least one of which is at greater than or equal to 6 months of age

AND

No other laboratory or clinical evidence of HIV infection (i.e., has not had any positive virologic tests, if performed, and has not had an AIDS-defining condition).

or

Clinical or Other Criteria (if the above definitive or presumptive laboratory criteria are not met)

Determined by a physician to be "not infected", and a physician has noted the results of the preceding HIV diagnostic tests in the medical record

AND

NO other laboratory or clinical evidence of HIV infection (i.e., has not had any positive virologic tests, if performed, and has not had an AIDS-defining condition)

IV. A child aged less than 18 months born to an HIV-infected mother will be categorized as having perinatal exposure to HIV infection if the child does not meet the criteria for HIV infection (II) or the criteria for "not infected with HIV" (III).

* Draft revised surveillance criteria for HIV infection were approved and recommended by the membership of the Council of State and Territorial Epidemiologists (CSTE) at the 1998 annual meeting (11). Draft versions of these criteria were previously reviewed by state HIV/AIDS surveillance staffs, CDC, CSTE, and laboratory experts. In addition, the pediatric criteria were reviewed by an expert panel of consultants. [External Pediatric Consultants: C. Hanson, M. Kaiser, S. Paul, G. Scott, and P. Thomas. CDC staff: J. Bertolli, K. Dominguez, M. Kalish, M.L. Lindegren, M. Rogers, C. Schable, R.J. Simonds, and J. Ward]

** Children aged greater than or equal to 18 months but less than 13 years are categorized as "not infected with HIV" if they meet the criteria in **III**.

*** In adults, adolescents, and children infected by other than perinatal exposure, plasma viral RNA nucleic acid tests should **NOT** be used in lieu of licensed HIV screening tests (e.g., repeatedly reactive enzyme immunoassay). In addition, a negative (i.e., undetectable) plasma HIV-1 RNA test result does not rule out the diagnosis of HIV infection.

**** HIV nucleic acid (DNA or RNA) detection tests are the virologic methods of choice to exclude infection in children aged less than 18 months. Although HIV culture can be used for this purpose, it is more complex and expensive to perform and is less well standardized than nucleic acid detection tests. The use of p24 antigen testing to exclude infection in children aged less than 18 months is not recommended because of its lack of sensitivity.

APPENDIX B

Figure B1 Kansas AIDS Cases
By Year of Report and Diagnosis

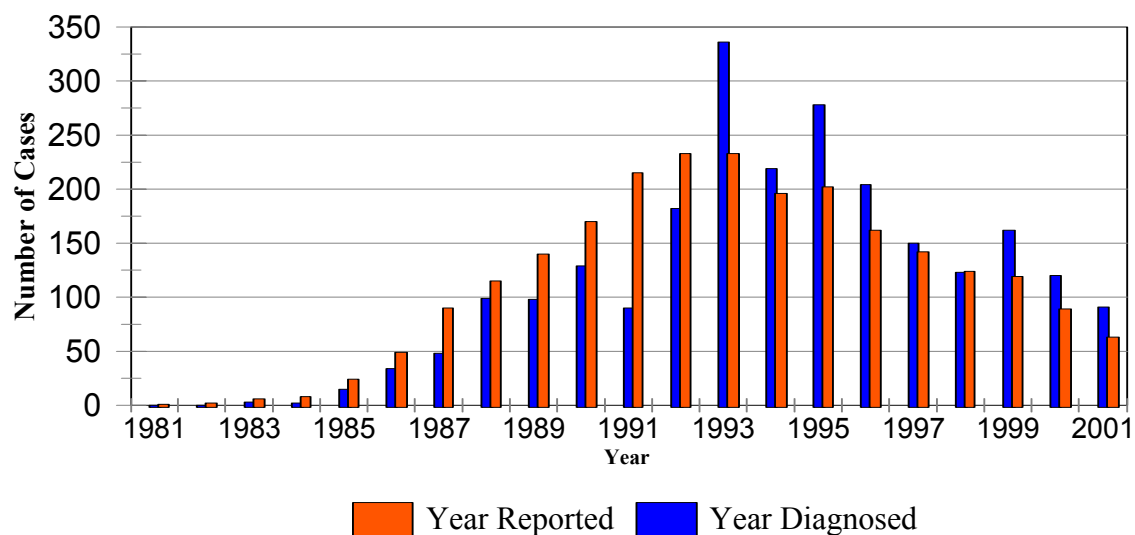


Table B1. Kansas AIDS Cases by Year Diagnosed and Gender

Year Diagnosed	Male	Female	
1981	1	0	
1982	2	0	
1983	6	0	
1984	8	0	
1985	24	0	
1986	43	6	
1987	82	8	
1988	108	7	
1989	134	6	
1990	156	14	
1991	198	17	
1992	207	26	
1993	213	20	
1994	178	18	
1995	174	28	
1996	138	24	
1997	131	11	
1998	109	15	
1999	102	17	
2000	74	15	
2001	57	6	
Total	2145	238	2383

Table B2. Kansas AIDS Cases by Year of Diagnosis and Race/Ethnicity

Year Diagnosed	White	Black	Hispanic	Asian	Native American	Total
1981	1	0	0	0	0	1
1982	2	0	0	0	0	2
1983	6	0	0	0	0	6
1984	7	1	0	0	0	8
1985	22	1	1	0	0	24
1986	44	4	1	0	0	49
1987	69	14	6	1	0	90
1988	96	15	2	0	2	115
1989	115	20	5	0	0	140
1990	143	22	4	0	0	170
1991	167	34	11	1	2	215
1992	181	36	15	0	1	233
1993	180	30	15	1	7	233
1994	146	35	9	2	4	196
1995	150	42	8	1	1	202
1996	114	36	9	1	2	162
1997	102	27	11	1	1	142
1998	68	34	21	0	1	124
1999	83	22	11	1	1	119
2000	50	26	12	1	0	89
2001	34	17	10	1	1	63
TOTAL	1780	416	151	11	23	2383*

*Includes 2 with unknown race/ethnicity

APPENDIX C

Table C1. Surveillance Summary of Reported AIDS Cases in Kansas and the U.S.

	Kansas		U.S.	
	Adult/Adolescent	Pediatric	Adult/Adolescent	Pediatric
Cumulative cases	2,358	25	784,032	8,994
Cumulative deaths	1,392	12	331,921 Total	
Prevalent cases	986	5	461,105 Total	

U.S. AIDS data as of June 2001

**Table C2. Cumulative AIDS Cases in Kansas and U.S. by Age at Diagnosis and Race/Ethnicity
Reported as of 12/31/01**

AGE	# of KS AIDS Cases	# of U.S. AIDS Cases
Under 13	25	8,994
13-19	19	4,219
20-29	528	130,965
30-39	1076	353,102
40-49	538	208,870
>49	197	86,875
Total	2,383	793,025

RACE	# of KS AIDS Cases	# of U.S. AIDS Cases
White	1,780	337,035
Black	416	301,784
Hispanic	151	145,220
Asian/Pacific Islander	11	5,922
American Indian/Alaska Native	23	2,433
Total	2,383*	792,394

*Includes 2 with unknown race/ethnicity

U.S. AIDS data as of June 2001

Table C3. Surveillance Summary of Reported Cumulative and Prevalent HIV Cases in Kansas and the U.S.

	Kansas		U.S.	
	Adult/Adolescent	Pediatric	Adult/Adolescent	Pediatric
Cumulative cases	224	1	140,722	2,127
Prevalent cases	350	1	-	-

U.S. HIV data as of June 2001

Table C4. Cumulative HIV Cases in Kansas and U.S. by Age of Diagnosis and Race/Ethnicity Reported as of 12/31/01

AGE	# of KS HIV Cases	# of U.S. HIV Cases
Under 13	1	2,206
13-19	7	5,892
20-29	60	47,397
30-39	96	56,004
40-49	49	25,365
>49	12	8,880
Total	225	145,744

RACE	# of KS HIV Cases	# of U.S. HIV Cases
White	131	54,195
Black	59	75,687
Hispanic	25	12,553
Asian/Pacific Islander	2	597
American Indian/Alaska Native	1	905
Total	225*	143,937

* Includes 7 with unknown race/ethnicity

U.S. HIV data as of June 2001